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January 12, 1972, Volume 71, Number 1
Michigan State Medical Society
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MSMS Testifies before National Democratic Council

MSMS Lists Michigan Medical Needs; Describes Steps toward Solutions

I appreciate the invitation extended to the Michigan State Medical Society to appear today before the Democratic Policy Council of the Democratic National Committee. I am Doctor Brooker L. Masters, a family physician at Fremont, Michigan, a rural community of 3,400 in western Michigan. I appear here in my capacity as chairman of the board of directors (Council) of the Michigan State Medical Society, the professional association of 8,101 doctors of medicine in Michigan.

With me today is Doctor Donald N. Sweeny, Jr., a surgeon in group practice here in Detroit. Doctor Sweeny is a member of our board of directors; and long has been active in the Wayne County Medical Society. Should you have any questions today or in the future, we are available to provide the views of both the rural and urban doctor of medicine.

We are pleased that you have invited providers of health care so that you can obtain first-hand the views and suggestions of the doctors, nurses, dentists.

We accepted because it is our strong contention that the political parties, candidates, and the elected representatives have not generally sought views of the physicians in practice. Those doctors who actually see patients every day can accurately evaluate the problems and suggest possible workable solutions.

Our Michigan State Medical Society membership spans the whole spectrum of medical doctors—from the medical school professor to the medical researcher to the salaried physician to the fee-for-service solo practitioner. But it is only through the Michigan State Medical Society that the private practitioner has a voice in Michigan.

* * *

As the prime providers of medical care in Michigan, doctors are deeply concerned about the health and medical needs of the people in Michigan. We have 40 active committees which study various medical concerns and we are activists in attacking these problems.

Our presentation today is developed in accordance with the request made in your invitational letter. Your letter said—"These hearings will give

EDITOR'S NOTE:

Here is the complete testimony offered by the Michigan State Medical Society before the national Democratic Policy Council in Detroit, Jan. 12. The Democratic Policy Council invited MSMS to discuss Michigan medical needs. Brooker L. Masters, MD, Chairman, MSMS Council, who presented the testimony, explains that the statement was developed to establish MSMS as a leader in working on Michigan health needs, and to report steps being taken by MSMS to help solve these problems.

The testimony was based on resolutions adopted by the MSMS House of Delegates in recent years. The statement, Doctor Masters adds, also pointed out several weaknesses in current governmental health care programs without implying that any new revolutionary approach is needed. The statement also stressed the need to continue the pluralistic approach to the practice of medicine.

Members of the MSMS Council overwhelmingly indicated to Doctor Masters that this Democratic Party invitation should be accepted. The Party plans four such hearings across the nation, the first being the one in Detroit.

The AMA will testify before the Democratic Platform Committee on national issues and advised MSMS to make its presentation deal with Michigan needs and projects.

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the Democratic Party an opportunity to develop proposals which respond appropriately to the needs of the country."

We have studied the 1968 platform of the National Democratic Party. We share your concerns about medical research, the physician shortage, maternal and perinatal health care, drug education, and others.

Your 1968 platform also called for "new coordinated approaches through a partnership of government and private enterprise." Again, the Michigan State Medical Society is at work to bring about stronger cooperative programs between the private practice of medicine and government.

Doctors agree with your 1968 health statement that—and I quote—"The best of modern medical care should be made available to every American."

* * *

We will discuss some of the specific needs that the Michigan State Medical Society has identified and urge that your Democratic Policy Council consider our approaches toward solutions.

These needs have been officially recognized by the Medical Society House of Delegates, which supervises ongoing study and action to solve these problems. Our House of Delegates is a truly representative body, consisting of one delegate elected in each county medical society to represent each 50 physicians.

Time forces me to select what I feel are six major medical needs facing doctors and everyone in Michigan.

Need #1:
Michigan medical schools should be enlarged

Michigan issues an average of 650 permanent licenses each year to doctors of medicine. In order to better meet our own needs in Michigan, our Medical Society was a prime proponent of the new medical school at Michigan State University. We have worked for many years to convince the State legislature to increase appropriations to expand the medical school enrollments at the University of Michigan and Wayne State University—and now also at Michigan State University. We are pleased that the number of medical students in Michigan has increased from 1,342 in 1966 to 1,710 in 1971. This is an increase of 368 in just five years.

Last June there were 343 young men and women graduated from Michigan medical schools. This figure will soon surpass 400; but still leaves us considerably short. In addition to the 650 doctors who receive permanent licenses in Michigan each year, there are 200 graduates of foreign medical schools who receive temporary Michigan licenses.

"MSMS has worked many years to convince the legislature to increase appropriations to the medical schools."

We feel that every qualified applicant for medical schools in Michigan and the nation should be admitted. Medical school officials report that at present only 60 per cent of the qualified students can be accepted.

I believe many Michigan doctors will utilize the newly-emerging physician assistants to help provide more care for more people. In 1965 the Michigan State Medical Society was the first such society in the nation to support this new kind of medical personnel. HEW reports that the developing physician assistant program at Western Michigan University is the only one in the nation with the endorsement of a state medical society.

* * *

Need #2:
Michigan needs more family physicians

Michigan residents—and I am sure those in other states too—need and want more family physicians. Doctors do too. During the '60s, more and more doctors chose to specialize and fewer went into general practice. The Michigan State Medical Society has had active committees since 1967 working to help turn this situation around.

Dedicated GPs are spearheading real progress here—Future Family Physician Clubs have been established at all three schools, and five Michigan hospitals now are offering family practice residencies. The three medical schools have altered their curricula to give more attention to family and community medicine.

MSMS has urged the legislature and the medical schools to create Departments of Family Practice, and we are cooperating now in a special Michigan Legislative Study Committee to study the complex problem.

We are encouraged, too, with the reports in Michigan that a much higher percentage of medical students is deciding today to enter general practice as a meaningful way to treat the whole person.

* * *

Need #3:
Distribution of physicians must be improved

There are areas in Michigan where there are shortages of physicians and other health personnel. We are deeply concerned about such shortages in some rural areas, in some small communities, and the inner city of Detroit.

Many rural areas lack educational facilities as well as the chance for professional relationships and cultural activities for the doctor and his family. The center city has become a depressing place to work or live and the threats to safety of the person and property are real. For example, five doctors of medicine have been murdered in the inner city of Detroit in the past two years.

We are opposed to coercion or mandatory assignment to practice in any specified area, because we believe the doctor should have freedom to choose his own place to practice.

"Medicare and Medicaid programs should cover home health care service and more preventive medicine."

MSMS committees are active to solve these problems and we see some improvements. Each situation requires different solutions. We can point to examples of group practice arrangements, community health centers, satellite clinics, mobile screening programs, and others as innovative answers.

Here in Detroit, for example, a new medical center was erected in 1971 by a group of Black private physicians led by Doctor Lionel Swan to provide them the opportunity to practice in one building with savings in personnel, laboratory facilities, business operations and other opportunities.

The Michigan Medical Society is the major supporter of the Michigan Health Council which operates an effective program to assist Michigan communities to obtain more physicians. Since 1953 the Health Council has helped to place 1,100 physicians in our state.

* * *

Need #4:
There must be more preventive medicine

Because the level of education in Michigan and the nation has never been higher than it is today we find a new acceptance by the people of preventive medicine. Doctors are trained to practice and preach preventive medicine and we are pleased to see the climate improving.

The Michigan State Medical Society has adopted resolutions endorsing multiphasic health screening, and supporting the use of computers. MSMS regularly sponsors public seminars on cancer, arthritis, smoking and alcoholism, often with the support of local newspapers. MSMS every day distributes educational materials about drug abuse, about venereal disease, and other health problems to school children.

Our Medical Society was active in urging the Michigan legislature in 1969 to pass a law which now assures comprehensive health education from kindergarten through high school.

I will make further comments about preventive medicine under Need #5.

* * *

Need #5:
There must be improvements in current governmental health programs

In the original Medicare and Medicaid legislation, home health care services such as visiting nurses were covered . . . but last year this part of the program was severely curtailed. MSMS adopted a resolution pointing out that such curtailment denies health care to a large segment of our chronically-ill aging population. Home health services by visiting nurses under the direction of physicians are traditional, are effective, and are the most economical of all health services.

The present guidelines for Medicare and Medicaid must be changed to permit doctors to practice preventive medicine with these patients. Today, physical examinations, immunizations, Pap smears for cancer, and other preventive medical procedures are not covered.

Speaking about Medicaid, the doctors of Michigan have worked diligently to make the state program operate effectively and efficiently. We have conferred many times with state Medicaid officials.

On March 2, 1971, MSMS presented 12 suggestions to improve the state Medicaid program to provide better health care for the medically indigent. At that time, we advocated greater emphasis on preventive programs, health maintenance, and ambulatory care. A copy of the 12 recommendations is attached to the statement given members of your policy council.

* * *

Need #6:
The pluralistic system must continue

The Michigan State Medical Society has an official position recognizing that "there are currently many acceptable methods of practicing medicine." Michigan physicians "feel that multiple options for the delivery of medical care should remain open to physicians."

Our nation is great because we do have pluralistic systems of education, agriculture and others. It is appropriate because no single approach will work across our large nation where population densities vary, where cultural values differ, and so many conditions are unique.

In Michigan today we have solo medical practices, group practices, professional corporations, clinics, hospitals with salaried staffs, hospitals with fee-for-service staffs, and other forms of practice. We believe that each in its own way is contributing to the effective practice of medicine in Michigan. These variations permit the doctor to select the best structure to provide care for his patients.

Any insistence that medicine be practiced the same in the inner city of Detroit as in my rural community in Western Michigan would be unwise.

* * *

Let me recap the six major Michigan medical needs we have identified for you as requested in your invitational letter:

"MSMS feels that multiple options for the delivery of medical care should be open to physicians."

TO MSMS MEMBERS:

As you read this testimony, I especially call your attention to the discussion of the six Michigan medical needs and to the copy which describes our MSMS work to relieve and solve these problems.

If you feel that too little has been done to correct these problems, MSMS members can take the following actions: (1) work harder through appropriate component society committees to develop positive programs, (2) urge component society delegates to the MSMS House of Delegates to introduce resolutions with workable plans to attack the issues, and (3) encourage and assist MSMS committees to deal effectively with problems in their sphere of expertise.

This review of Michigan needs and our efforts also will challenge the MSMS Committee on Planning and Priorities to step up its work.

Any reactions to the testimony or suggestions to improve MSMS efforts to solve medical needs in our state will sincerely be welcomed. Just mail them to me at MSMS, 120 West Saginaw, East Lansing 48823.

Brooker L. Masters, MD
Chairman, MSMS Council

1. Michigan medical schools should be enlarged.
2. Michigan needs more family physicians.
3. The distribution of physicians must be improved.
4. There must be more preventive medicine.
5. There must be improvements in current governmental health programs.
6. The pluralistic system must continue.

In discussing each of these Michigan needs, we have described briefly only a few of the many positive programs of the Michigan State Medical Society. Our component county medical societies, too, have action programs, as do the Michigan medical specialty organizations.

"The medical profession accepts its vital role in this evolution toward further improvements."

We continually work with and have offered our services to the Michigan legislature, the medical schools, the Michigan Consumer Council, and concerned lay groups.

Our testimony has focused on Michigan medical needs because we are certain the American Medical Association will be invited to discuss national issues later before the Democratic Party platform committees.

* * *

Through our illustrations today we hopefully have convinced you that the Michigan State Medical Society is a responsible organization of dedicated professional people. We think the individual physicians of Michigan provide good quality care for the people of Michigan.

We share the same concerns that consumers have. New ideas must be considered jointly so that practitioners in medicine can share in new experimental programs.

The medical profession accepts its vital role in this fast-moving evolution toward further improvements. We are dedicated to making available medical care for everybody. We are deeply concerned about the costs of medical care. We are insistent through our many review committees that high professional standards of quality be maintained.

No country has developed, in the opinion of physicians, a better combination of these three factors—general access, reasonable cost, and high quality.

There HAS been real progress in Michigan and our nation.

The Michigan State Medical Society is dedicated to working for further improvements. Toward this end Michigan's doctors are prepared to work with any responsible political force such as this Council.

Thank you again for inviting us. If we can be of further help, please call on us.

Jan. 12, 1972, Vol. 71, No. 1

Michigan
Medicine

MICHIGAN STATE MEDICAL SOCIETY

Published three times each month and four times in December and January, 38 issues, by the Michigan State Medical Society as its official journal. Second class postage paid at East Lansing, Mich. and at additional mailing offices. Yearly subscription rate, $9.00. Printed in USA. All communications should be addressed to the Publications Committee, Michigan State Medical Society, 120 West Saginaw Street, East Lansing, Michigan 48823. © 1972 Michigan State Medical Society. Phone: Area Code 517, 337-1351.

EDITOR: HERBERT A. AUER

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Michigan Medicine

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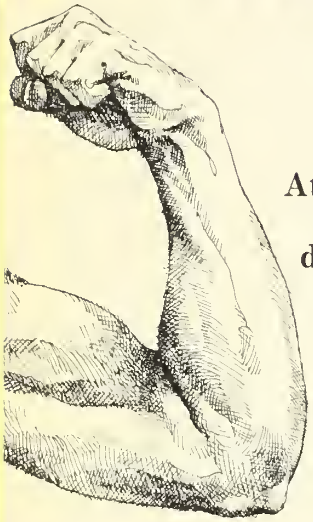
MOTHER AND CHILD by Gari Melchers. Courtesy of the Art Institute of Chicago

See page 38 for complete program
of 1972 Michigan Conference on Maternal and Perinatal Health

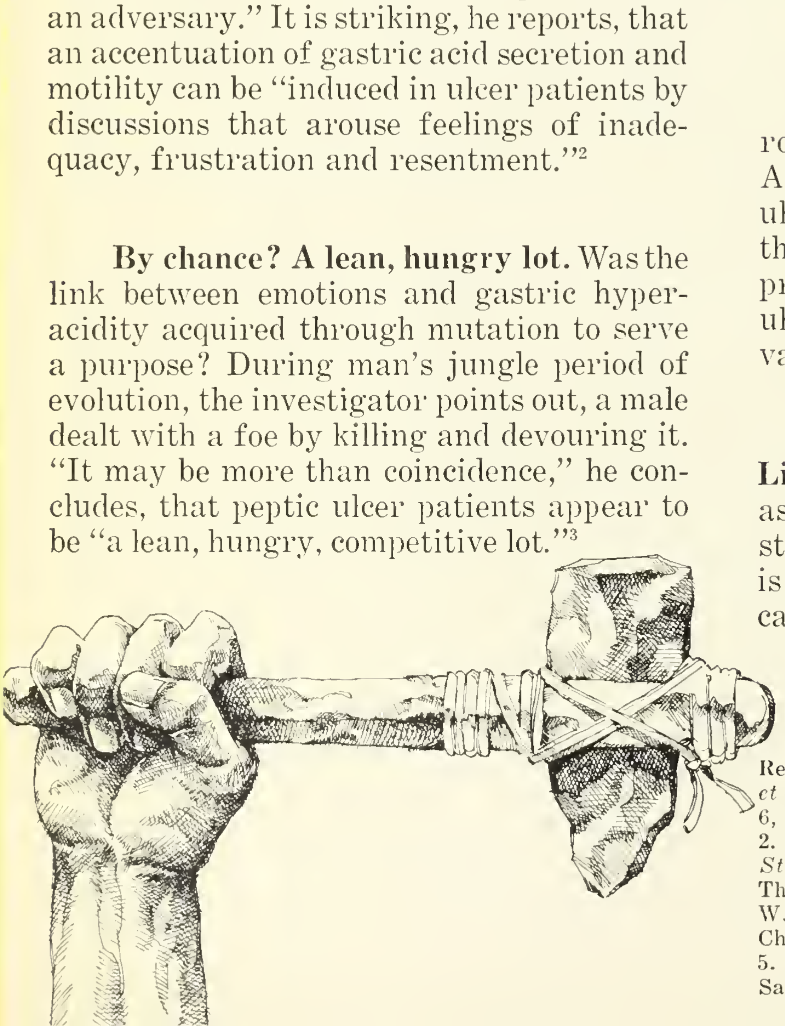
IF MORE MEN CRIED



At least seventy-five out of one hundred adults with duodenal ulcers are men.[1] Why? It may be significant that duodenal ulcer patients tend to crave recognition and are "especially vulnerable to threats to their manly assertive independence."[2]

Hypersecretion—an atavistic response. Stewart Wolf, who, with Harold G. Wolff, studied the personalities of duodenal ulcer patients, wonders if masculine competitiveness is related to "an atavistic urge to devour an adversary." It is striking, he reports, that an accentuation of gastric acid secretion and motility can be "induced in ulcer patients by discussions that arouse feelings of inadequacy, frustration and resentment."[2]

By chance? A lean, hungry lot. Was the link between emotions and gastric hyperacidity acquired through mutation to serve a purpose? During man's jungle period of evolution, the investigator points out, a male dealt with a foe by killing and devouring it. "It may be more than coincidence," he concludes, that peptic ulcer patients appear to be "a lean, hungry, competitive lot."[3]



Big boys don't cry. If more men cried, maybe fewer would wind up with duodenal ulcers. But men will be men—the sum total of their genes and what they are taught. Schottstaedt observes that when a mother admonishes her son who has hurt himself that big boys don't cry, she is teaching him stoicism.[4] Crying is the negation of everything society thinks of as manly. A boy starts defending his manhood at an early age.

Take away stress, you can take away symptoms. There is no question that stress plays a role in the etiology of duodenal ulcer. Alvarez[5] observes that many a man with an ulcer loses his symptoms the day he shuts up the office and starts out on a vacation. The problem is, the type of man likely to have an ulcer is the type least likely to take long vacations or take it easy at work.

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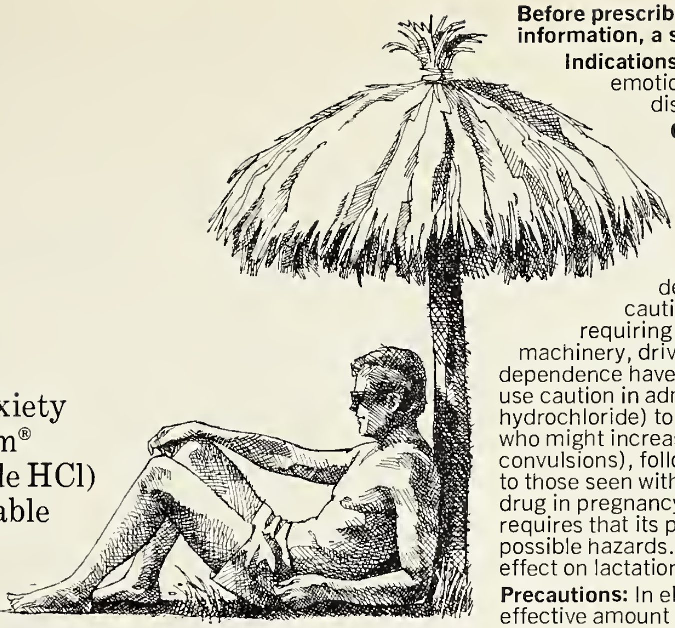
References: 1. Silen, W.: "Peptic Ulcer," in Wintrobe, M. M., *et al.* (eds.): *Harrison's Principles of Internal Medicine*, ed. 6, New York, McGraw-Hill Book Company, 1970, p. 1444. 2. Wolf, S., and Goodell, H. (eds.): *Harold G. Wolff's Stress and Disease*, ed. 2, Springfield, Ill., Charles C Thomas, 1968, pp. 68-69. 3. *Ibid.*, p. 257. 4. Schottstaedt, W. W.: *Psychophysiologic Approach in Medical Practice*, Chicago, Ill., The Year Book Publishers, Inc., 1960, p. 163. 5. Alvarez, W. C.: *The Neuroses*, Philadelphia, Pa., W. B. Saunders Company, 1951, p. 384.



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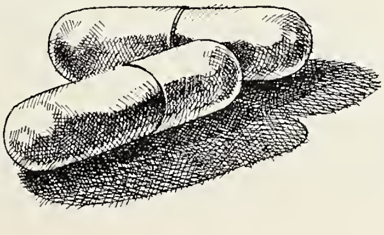

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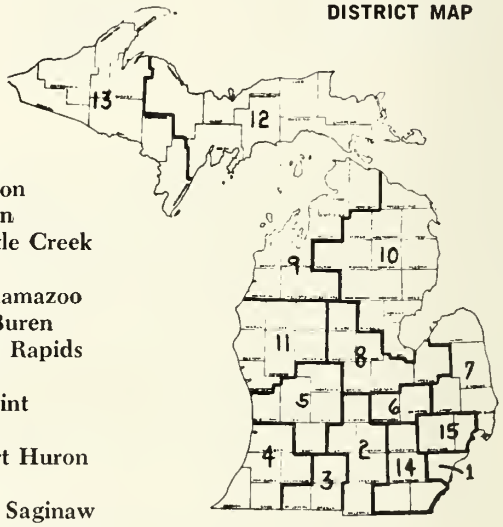

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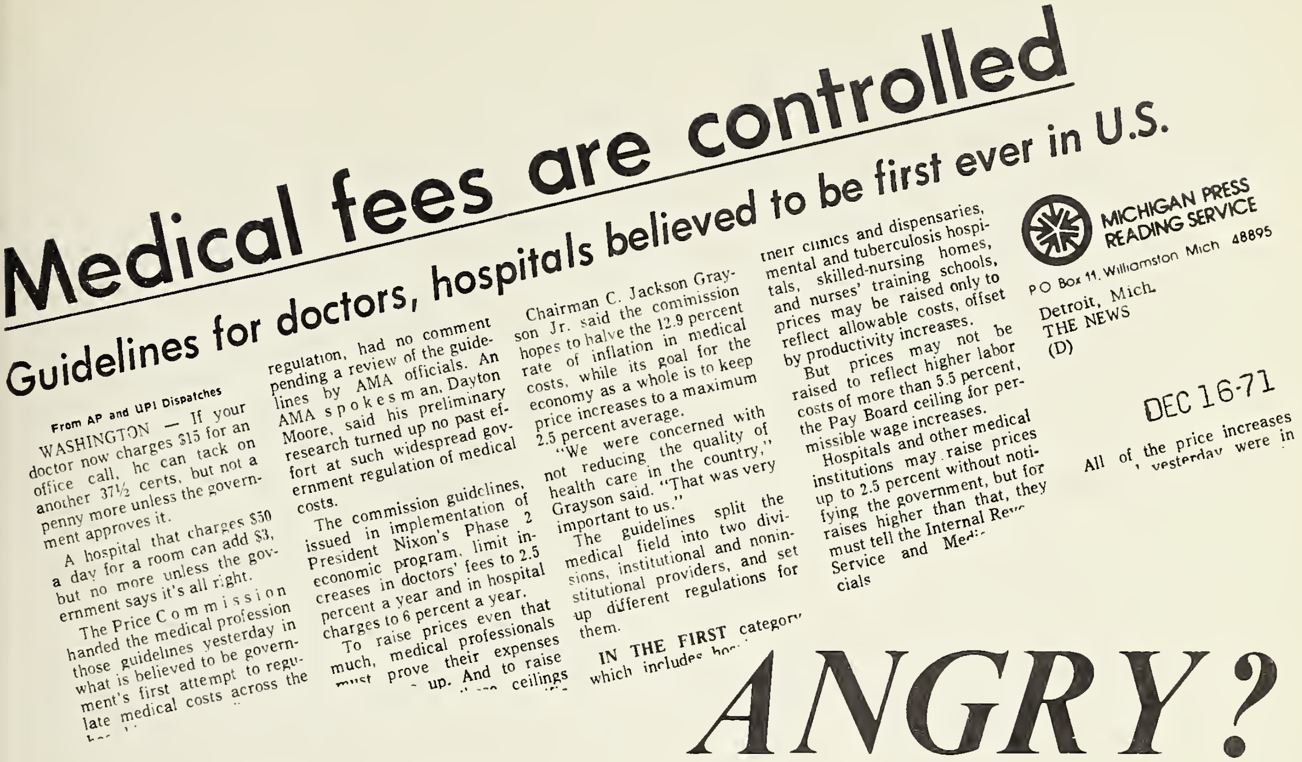

Medical fees are controlled

Guidelines for doctors, hospitals believed to be first ever in U.S.

From AP and UPI Dispatches

WASHINGTON — If your doctor now charges $15 for an office call, he can tack on another 37½ cents, but not a penny more unless the government approves it.

A hospital that charges $50 a day for a room can add $3, but no more unless the government says it's all right.

The Price Commission handed the medical profession those guidelines yesterday in what is believed to be government's first attempt to regulate medical costs across the

regulation, had no comment pending a review of the guidelines by AMA officials. An AMA spokesman, Dayton Moore, said his preliminary research turned up no past effort at such widespread government regulation of medical costs.

The commission guidelines, issued in implementation of President Nixon's Phase 2 economic program, limit increases in doctors' fees to 2.5 percent a year and in hospital charges to 6 percent a year.

To raise prices even that much, medical professionals must prove their expenses up. And to raise ceilings

Chairman C. Jackson Grayson Jr. said the commission hopes to halve the 12.9 percent rate of inflation in medical costs, while its goal for the economy as a whole is to keep price increases to a maximum 2.5 percent average.

"We were concerned with not reducing the quality of health care in the country," Grayson said. "That was very important to us."

The guidelines split the medical field into two divisions, institutional and noninstitutional providers, and set up different regulations for them.

IN THE FIRST category which includes

their clinics and dispensaries, mental and tuberculosis hospitals, skilled-nursing homes, and nurses' training schools, prices may be raised only to reflect allowable costs, offset by productivity increases.

But prices may not be raised to reflect higher labor costs of more than 5.5 percent, the Pay Board ceiling for permissible wage increases.

Hospitals and other medical institutions may raise prices up to 2.5 percent without notifying the government, but for raises higher than that, they must tell the Internal Rev Service and Med cials

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All of the price increases yesterday were in

ANGRY?

Doctor, are you upset over the recent freeze on medical fees or any in a series of political moves to control the medical profession? What are you going to do?

Ask yourself, how would George Meany or Leonard Woodcock respond to similar pressures? Almost every working man in Michigan "voluntarily" contributes $1 a week, $52 a year, for political action.

Can you afford to do less?

Within the past few days you have received your billing statement for county, state and AMA dues. Attached to the statement is a separate billing for MDPAC, the Michigan Doctors Political Action Committee, which is voluntary and not deductible. In view of the fee freeze, you have only three options on the MDPAC contribution:

1. You can delete the MDPAC portion completely and continue to complain about government control of health care.
2. You can make the minimal contribution of $25 to MDPAC. If every physician in Michigan contributed $25, the voice of medicine would be able to speak out to the tune of more than $200,000.
3. Or if you are really angry and want to start playing the game by the same rules as those who are consistent winners, cross out the $25 and make your contribution for $100. $100 makes you a sustaining member of MDPAC.

Think about what a freeze on medical fees means to you. Think about what kind of precedent it sets for the future. Think about it—and decide what you're going to do about it.

MDPAC

Michigan Doctors Political Action Committee

P.O. Box 769 East Lansing, MI 48823

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4. Articles should ordinarily be less than four printed pages in length (3000 words).
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MICHIGAN MEDICINE is the official organ of the Michigan State Medical Society, published under the direction of the Publication Committee. Published Semi-Monthly, Trimonthly in January and December; 26 issues, by the Michigan State Medical Society as its official journal. Second class postage paid at East Lansing, Mich. and at additional mailing offices. Yearly subscription rate, $9.00; single copies, 80 cents. Additional postage: Canada, $1.00 per year; Pan-American Union, $2.50 per year; Foreign, $2.50 per year. Printed in USA. All communications relative to manuscripts, advertising, news, exchanges, etc., should be addressed to Judith Marr, Michigan State Medical Society, 120 West Saginaw Street, East Lansing, Michigan 48823. Phone Area Code 517, 337-1351.
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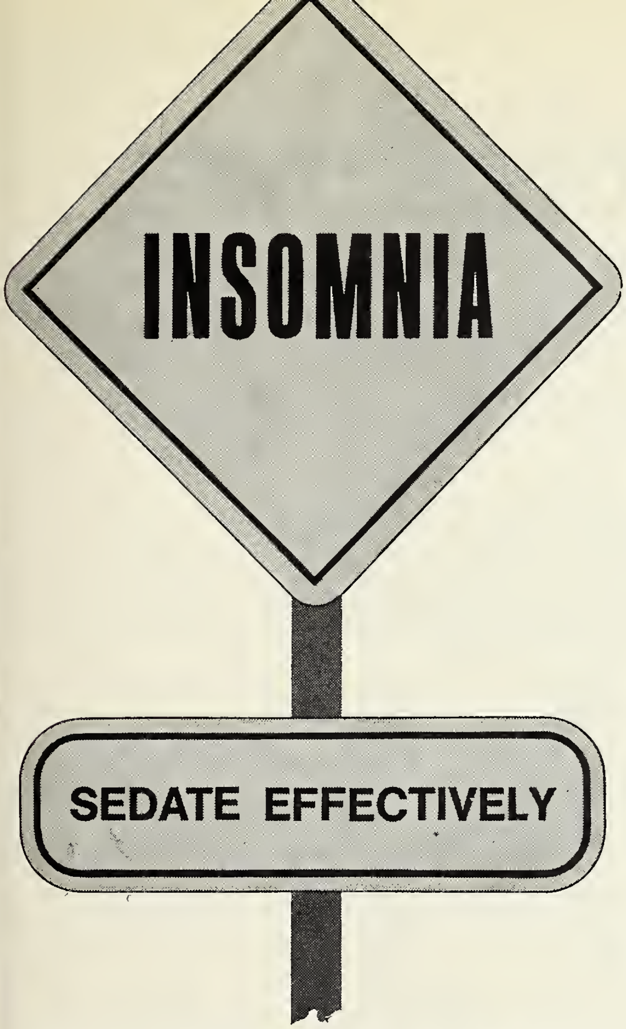

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Charles L. Votaw, MD, Ann Arbor, is new assistant dean for curriculum in the University of Michigan Medical School, effective Dec. 1. He will be responsible for administrative support to the development, implementation and evaluation of the undergraduate medical school curriculum.

Harold Roehm, MD, Bloomfield Hills, is the recipient of a special plaque from St. Joseph Mercy Hospital acknowledging his contribution to the growth of its pediatric department, which he founded in 1927. Doctor Roehm has retired after 48 years in practice.

Memorial contributions in the name of the late P. F. Stoller, MD, St. Johns, will be used to refurnish and provide new equipment for the pediatric department of the Clinton Memorial Hospital. The department also is being renamed for Doctor Stoller, who served as school physician for the children of the community before his death Aug. 28.

Harry J. Burkholder, MD, Alpena, has completed 50 years of service as a surgeon in his northern Michigan community. He was honored at an open house in the Alpena Civic Auditorium recently, and at halftime during an Alpena High School football game and by his office staff and medical colleagues at the Alpena Hospital. He was graduated in 1916 from Johns Hopkins Medical School and received a 50-year award in 1966 from MSMS.

James L. Conklin, MD, Ann Arbor, is new associate dean for student affairs at the Michigan State University College of Human Medicine. He has been associate professor of anatomy in the University of Michigan Medical School. At MSU, Doctor Conklin will be responsible for student admissions, counseling and financial assistance programs in the medical school. He succeeds Daniel F. Cowan, MD, who will return to full-time teaching and research.

David Charles Nolan, MD, Detroit, is new director of the Detroit Health Department's epidemiology division and is therefore responsible for reports and investigations of communicable diseases. He has been associated with the Wayne State University School of Medicine as an assistant professor of medicine.

Muskegon County is seeking a new health department director since the resignation Nov. 12 of Paul R. Engle, MD, who is planning to relocate in California. Doctor Engle has held the position since 1969.

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*ata compiled from reports of 14 investigators. **Diagnosis was confirmed by cultural identitication of *N. gonorrhoeoe* on Thayer-artin media in all patients. Criteria for cure: negative culture after at least 2 days post-treatment in males and at least 7 days post-eatment in females. Any positive culture obtained post-treatment was considered evidence of treatment failure even though the llow-up period might have been less than the periods cited above under "criteria for cure" except when the investigator determined at reinfection through additional sexual contacts was likely. Such cases were judged to be reinfections rather than relapses or ilures. These cases were regarded as non-evaluatable and were not included. JA72 1848-6

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Your opinion please

MSMS asked the question:

What would you suggest be done to slow down the emigration of medical graduates from Michigan? (The recent MSMS House of Delegates authorized the speaker to appoint an Ad Hoc committee to investigate the reasons why so many Michigan medical school graduates go to other states for internships and residencies, and to submit recommendations back to the 1972 House to help counteract this movement.)

These doctors replied:

Donald N. Fitch, MD
Escanaba

I think the answer obviously touches many fields inasmuch as the reasons a physician picks to settle in a certain area are practically as diverse as the number of doctors themselves. Thus I think we need to look at each level of the problem and see what can be done at that particular level.

First of all, it depends somewhat on where the medical students are taken from, as to where they are most likely to return. Certainly this does not hold true in every instance or maybe not even in most instances, but it is a fact that many students do return to a similar environment from which they came. Consequently, we need to be sure we are getting enough students from the rural areas and from the minority and ghetto areas.

As far as attracting students to particular practice areas, I think the senior externship program is probably the best means of accomplishing this. We have had some experience with this, and I am sure the results are going to prove this out within a few years. Although we don't necessarily expect any or all of the students to come back to this area we feel we have interested them in our type of practice and to some extent in our area. I think much more could be done to encourage the senior students to take externships outstate where they will be exposed to the various practice situations to which we hope to attract them later. Certainly this is not always as convenient but those who do make the effort, are very pleased with the results. Unquestionably more encouragement could be given by the faculties and counselors in this regard.

Doctor Fitch

Doctor Stilwill

The internships and residencies certainly are a major factor in a doctor's decision on where to practice. Many students prefer to take their training in the area in which they hope to locate. In this regard, there are several problems. First of all, the internships themselves lately have become of much less importance than the residency program inasmuch as the full rotating internship is almost a thing of the past. Consequently many students are looking very carefully at the particular department in which they hope to specialize and the internship as well is chosen with this in mind. Thus we need to look carefully to see if our departments are giving the leadership that the students are looking for and are presenting as attractive programs to the students. In this regard also, Michigan is far behind in developing family practice residencies as compared with several other states which are very definitely attracting students from our state. I think strong departments in family practice should be organized with some if not most representation in the departments being actual previous practitioners of that type of medicine. In addition the medical schools themselves need to put more emphasis in that specialty.

A further factor relates to the fact that many of the out-state training programs in regard to internship and residency are probably not nearly as well advertised as they might be. The students barely know that they exist and certainly are not strongly attracted to them unless they have some special knowledge of the situations. In the same light, however, I might state that there are also particular internships, in which a strong effort is made to the student but it is quickly found out once the internship is begun that what was stated and what actually exists are two entirely different things. I think that this can only discourage a doctor from deciding to settle in that area and certainly this situation is a very negative factor.

Finally, I think we have to propagandize to counteract the mythological attraction of other areas of the country. When it boils right down to it, I think Michigan has more to offer than a lot of these states and yet because we aren't as well advertised, the grass always seems much greener there.

(Continued on Page 12)

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But actually in talking to some of the emigrants to these areas I don't think they're really that satisfied with their choice. If we could retain their interest in Michigan before they go away, I think we would have a much greater chance of keeping these doctors.

A big factor, especially nowadays, is that a doctor's wife is probably one of the major determinants in where they settle and how happy they are going to be there. I think we have to pay a particular attention to this aspect and see what can be done to keep these girls content as well as attracting them to certain areas in our state.

In summary then, I think there are many avenues we might attack in improving the situation and from the above comments I think there are definite areas in which the Michigan State Medical Society could actively participate to improve situations which would help this problem area.

George E. Stilwill, MD
Lansing

I have thought about this a lot, both before and after the meeting of the House of Delegates. I wish I had the answers. I sincerely believe that I don't have the answers, and most likely nobody who has been in practice more than five years has, either.

I think we're going to have to go to those involved.

I think the Speaker's Committee should survey the graduates of the last five years at Wayne State University and at the University of Michigan and ask them their opinions and specifically, their reasons for staying in Michigan or leaving the state.

I know residents go where the desirable residencies are available, and most frequently when they know the area, they generally stay fairly close to where they took their residency. I cannot, however, back any of this with any facts. It would seem to me that would be the major job of the Speaker's Committee—to gather facts, gather opinions of those who have been graduates and residents and have started practices in the last five years.

I personally am looking forward to the results of the deliberations of the Speaker's Committee on immigration of medical students.

(Doctor Stilwill was the sponsor of the resolution to appoint an investigative ad hoc committee, approved by the MSMS House.)

Doctor Swisher

Scott N. Swisher, MD
East Lansing

Physicians are virtually unanimous in believing that successful therapy hinges on a correct diagnosis. We, and the people of Michigan whom we serve, must be equally careful to insist first on an accurate diagnosis of the causes of the loss of young physicians from Michigan before we try to deal with the problem. I, for one, would be more impressed by factual data bearing upon the problem than by opinions about the situation, including my own opinion!

Recognizing that efforts have been made and may well be expanded to gather these necessary facts, one might still consider an hypothesis. I have been impressed with the number of young people who, after 10 to 12 years of education in one geographic area, are looking for a change of location for the sake of change. With already extensive family commitments, many of these physicians will make only one geographic move, commonly in search of a climate they at least think will be more agreeable. They never return. Would it not be wise to structure our undergraduate education, medical school experience and residency training deliberately to encourage some movement of students between geographic areas of the country with both rural and urban experiences? The fact is that Michigan is an excellent place to live and to practice medicine. If this can become known by both our own students after they have seen other areas and by other students who have had an opportunity to see this State, we may find ourselves in the position of receiving as many graduates as we lose.

The modernization of our licensure laws is an important step in promoting this exchange. Since the residency years seem to be crucial in determining a physician's location for practice, we should also look to ways to strengthen these programs and to extend their influence throughout the State.

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Friday, April 14

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Charles K. Friedberg, M.D., Editor of "Circulation," author of the definitive text on CVD, Mt. Sinai School of Medicine, New York.

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William B. Kannel, M.D., Medical Director, Framingham Heart Disease and Epidemiology Study, N.H.L.I., Framingham, Mass.

ATHEROSCLEROSIS: WHY AND HOW — A PATHOLOGIST'S VIEW

Gardner C. McMillan, M.D., Ph.D., Chief, Atherosclerotic Disease Branch, N.H.L.I., N.I.H., Bethesda, Md.

ATHEROSCLEROSIS AND HYPERTENSION

Ray W. Gifford, Jr., M.D., Head, Dept. of Hypertension and Nephrology, Cleveland Clinic.

DIETARY TREATMENT OF HYPERLIPIDEMIA & ATHEROSCLEROSIS

William E. Connor, M.D., Director, Clinical Research Center, University of Iowa College of Medicine.

PANEL — PRIMARY AND SECONDARY PREVENTION OF ATHEROSCLEROSIS

Saturday, April 15

CORONARY ARTERY DISEASE

THE SURGEON'S ROLE IN THE TREATMENT OF CORONARY ARTERY DISEASE

Norman E. Shumway, M.D., Ph.D., Chief, Cardiovascular Surgery Division, Stanford U. School of Medicine.

A RADIOLOGIST LOOKS AT CORONARY ARTERY DISEASE

Herbert L. Abrams, M.D., Chairman, Department of Radiology, Harvard Medical School.

THE ENIGMA OF ANGINA IN PATIENTS WITH NORMAL CORONARY ARTERIOGRAMS

Bernard L. Segal, M.D., Director, Post-Graduate Education, Division of Cardiology, Hahnemann Medical College, Philadelphia.

PANEL — CORONARY ARTERIOGRAPHY — WHY, WHEN AND FOR WHOM?

Thursday, April 13

STROKE — MOBILIZING THE COMMUNITY FOR THE VICTIM

DIMENSIONS OF STROKE IN THE COMMUNITY

Charles Wylie, M.D., Ph.D., Professor of Public Health Administration, School of Public Health, U. of M.

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John Gilroy, M.D., Director, Department of Neurology, Wayne State University School of Medicine.

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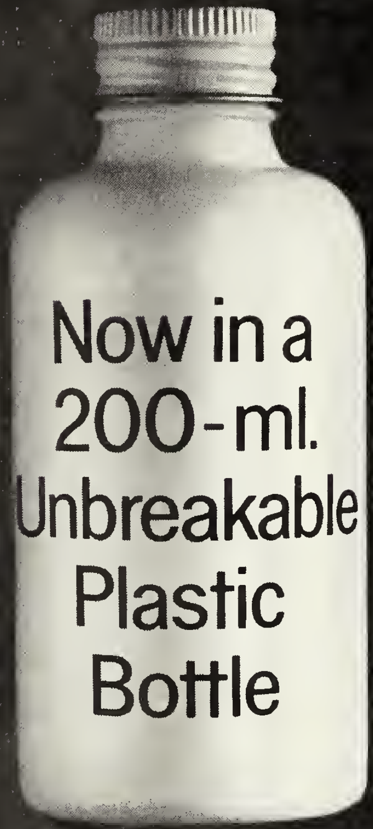
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Scientific papers

Hypovolemic shock

By William R. Olsen, MD
Ann Arbor

Although shock from low blood volume is a common disease familiar to most physicians, recent technological advances have allowed us to study shock more thoroughly and to understand it better. Hopefully, this increased understanding of the pathophysiology and treatment will be reflected in an increased survival of hypovolemic patients.

Although shock may be caused by a variety of conditions, the resultant circulatory derangements are similar. By definition, the common denominator is inadequate blood flow in the peripheral capillary bed.[1-4] For one reason or another, capillary perfusion is not sufficient to maintain normal cellular function. If shock persists cells will die and, with sufficient cellular death, the shock becomes irreversible, i.e., there are not enough viable cells to sustain life of the individual. Hypotension, *per se,* is not shock. Shock can exist with normal or elevated blood pressure, especially if the patient is receiving vasopressors, and in some circumstances capillary perfusion may be quite adequate despite a low arterial blood pressure.

Causes of Hypovolemia

The more common causes of hypovolemia need no elaboration. External hemorrhage from wounds, gastrointestinal hemorrhage, hemoperitoneum from lacerations of the spleen, etc. are usually apparent to the clinician. Bleeding into injured soft tissue following blunt trauma or retroperitoneal hemorrhage from a ruptured aortic aneurysm may be less obvious but severe. In some instances, the clinical signs of hypovolemia may be the first indication of hemorrhage and are the tip-off to search for the source.

External fluid losses from granulating wounds, diarrhea, etc., although usually obvious may be underestimated unless specifically measured.

Tissues injured by infection, burns, or blunt trauma become edematous over a period of hours after the injury. The resultant depletion of plasma volume may be sufficient to cause shock and death. Acute ileofemoral thrombophlebitis may cause massive edema with extravasation of many liters of fluid from the circulating blood volume and the interstitial fluid space in other parts of the body. The initial management of patients with acute bowel obstruction usually requires liberal fluid administration to replace the fluid trapped in the distended bowel and not available for tissue perfusion. This fluid reaccumulates very rapidly after operative evacuation with a resultant increased intravenous fluid need in the early postoperative period. A similar rapid reaccumulation of ascitic fluid after paracentesis may cause significant hypovolemia and shock, necessitating IV fluid replacement.

It is important to emphasize that head injuries do not produce shock except terminally. Although many patients with severe head injuries are in shock, the shock is almost always from loss of circulating blood volume from hemorrhage elsewhere.[5] Frequently, the signs and symptoms of the injury causing the hemorrhage may be obscured by the unconsciousness caused by the head injury. Beware of the patient with a head injury and shock—he is bleeding somewhere.

Pathophysiology of Hypovolemic Shock

Since a deficiency of nutritive capillary blood flow is accepted as the defect in hypovolemic shock, the physician must understand the microcirculatory flow changes produced by hemorrhage and the ability of therapeutic modalities to correct flow deficits if he is to evaluate methods of treatment.

Hemorrhage is followed by a variety of compensatory mechanisms, some more vestigial than useful. As blood volume is reduced, venous return to the heart is reduced with an associated decrease in ventricular diastolic filling and a decreased cardiac output. Baroreceptors in the aortic arch, carotid sinus and perhaps elsewhere, respond and trigger the release of epinephrine from the adrenal gland and norepinephrine from the sympathetic postganglionic nerve endings. These catecholamines stimulate adrenergic receptors throughout the body resulting in constriction of arterioles and veins (alpha adrenergic response) and tachycardia (beta adrenergic response). The alpha adrenergic receptors of the venous system are probably more sensitive to minimal catecholamine stimulation than those of arterioles.[6] Therefore, early hypovolemia is followed by selective venoconstriction. The venous (capacitance) system normally contains about 70% of the circulating blood volume but can expand or contract

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Doctor Olsen is associate professor of surgery, Section of General Surgery, The University of Michigan, Ann Arbor.

rapidly to accommodate larger or smaller volumes without altering the internal pressure appreciably. The arterial (resistance) system cannot change capacity to accommodate volume changes. Arterial volume changes are therefore reflected by changes in arterial blood pressure. The selective venoconstriction which accompanies early hypovolemia causes a shift of blood to the arterial portion of the circulation[7] allowing the patient to maintain a fairly normal cardiac output, arterial blood pressure and nutritive capillary flow despite the loss of 10 to 20% of the blood volume.

If the hemorrhage is limited or occurs slowly, plasma volume may be expanded or maintained by the inflow and protein from the interstitial space with resultant anemia.[8,9,10] If the hemorrhage is rapid this compensatory mechanism occurs too slowly to be of benefit.

As hemorrhage approaches 30 to 40% of the blood volume, the venoconstrictor compensatory mechanism is no longer adequate, the return of blood to the heart is reduced, cardiac output falls, catecholamine release is accentuated, arteriolar constriction predominates, and capillary flow is diminished. The resultant increase in peripheral resistance further diminishes the outflow of the arterial system but is insufficient to allow the maintenance of arterial volume. The arterial blood pressure falls, decreasing the nutritive capillary flow even more. At this point, clinical shock has reached dangerous proportions. If untreated, capillary sludging, thrombosis and cellular death will follow with eventual death of the patient.

Blood vessels in different vascular beds[11] and in different parts of the same organ[12] react differently to the same degree of hemorrhage. Thus, a blood volume loss sufficient to produce ischemia in one organ may not produce ischemia in another. This may allow selective perfusion of some vital organs, perhaps the central nervous system, in early shock and allow temporary maintenance of life. Other structures, for example the distal renal tubule, become ischemic in early shock and, if sufficiently damaged, may not function well enough to sustain life in the late post-shock period. It is necessary to understand the capillary flow changes produced by hemorrhage on *specific tissues* to understand the effects of hypovolemia and to be logical in its treatment.

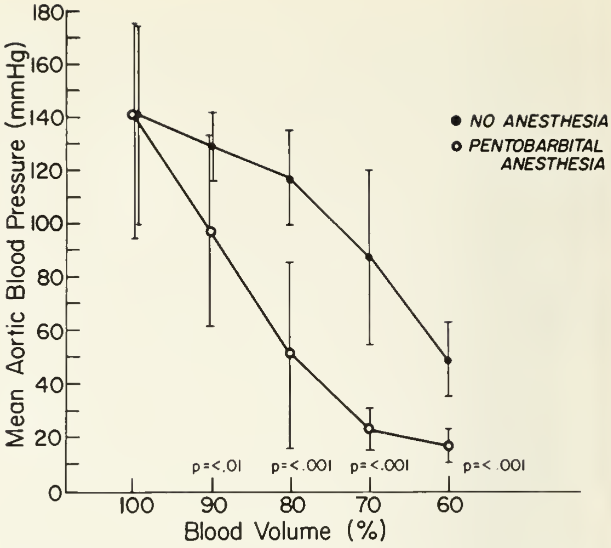

Figure 1. Blood pressure response to graded hypovolemia.[19] Note the difference between the anesthetized and nonanesthetized state.

Attempts to study the flow changes in shock have been hindered by the lack of methods of measuring capillary flow. Many investigators have attempted to estimate capillary flow by measuring large vessel flow, usually by operative methods in anesthetized dogs. Dogs are not good animals for the study of clinical shock since they develop splanchnic congestion following hemorrhage, a response not seen in humans.[13] Furthermore, methods which measure large vessel flow fail to differentiate nutritive capillary flow from flow through arteriovenous pathways. Frequently these methods have failed to consider the significant hemodynamic variables introduced by anesthesia,[14-20] operative manipulation[17,18,20,21] and the frequently resultant mild hypothermia[14,22] and hypovolemia, making their validity questionable. Radioactive methods can determine nutritive capillary flow without the variables introduced by anesthesia or operative manipulation.[12,19,23-26] Although much work remains to be done in this field, correlation of the results of studies measuring capillary flow in animals with clinical studies[27,28] allows us to formulate opinions regarding human responses to hemorrhage.

Figure 1 illustrates the blood pressure responses to graded arterial hemorrhage in the anesthetized and nonanesthetized pig,[19] an animal which does not develop splanchnic congestion after hemorrhage. These pressure curves are similar to those seen in humans after hemorrhage. When correlated with data regarding capillary perfusion following hemorrhage,[12,19] several generalizations can be made.

A mild (10 to 20%) hemorrhage produces little change in aortic blood pressure and no significant change in capillary flow to tissues other than the stomach. The venous, cardiac and arteriolar compensatory mechanisms seem to be sufficient to maintain a fairly normal microcirculation.

The protective compensatory mechanisms are no longer adequate after a 40% hemorrhage. The arterial blood pressure falls, peripheral vasoconstriction is accentuated and significant decreases occur in capillary blood flow to the renal cortex, stomach, skin, and skeletal muscles. Interestingly, adrenal blood flow is increased after hemorrhage. The difference in the degree of ischemia of various tissues is thought to represent local differences in reactivity to the adrenergic stimulation of hemorrhage, with varying degrees of local arteriolar constriction.

It is of particular interest that, while studies on *anesthetized* animals have shown the detrimental effect of hypotension on coronary artery flow,[16,19,29-32] this does not occur in the *nonanesthetized* state.[12]

The effect of hemorrhage on the anesthetized animal and human is considerably different than that observed in the nonanesthetized state. Anesthesia has a profound effect on the local distribution of nutritive capillary blood flow after hemorrhage.[19] A 20% hemorrhage under anesthesia will cause hypotension and ischemia of the stomach, skin and skeletal muscle in the presence of sodium pentobarbital. A 40% hemorrhage in the presence of anesthesia will cause a decrease in capillary flow to the myocardium, stomach, small intestine and skin. As in the nonanesthetized state, an increase in adrenal blood flow is observed. In the anesthetized state, the arterial blood pressure falls as low after a 20% hemorrhage as it does after a 40% hemorrhage in the nonanesthetized state and becomes a more sensitive indicator of the amount of hypovolemia.

The differences in responses of the anesthetized and nonanesthetized state are emphasized for two reasons. First, to caution the clinician against undue reliance upon experimental data derived from *anesthetized* animals, usually dogs, when evaluating and treating shock in *nonanesthetized* humans. Second, to emphasize the dangers of anesthetizing a patient in hypovolemic shock. Although a patient may be deceptively well compensated and have a reasonable arterial blood pressure following a 20% hemorrhage, anesthesia will convert him to a poorly compensated state, interfering with local capillary blood flow and causing the arterial blood pressure to drop to an unacceptable level. Since this mechanism may be responsible for some of the cardiac arrests that are seen with the institution of general anesthesia in hypovolemic patients, it is important, when feasible, to assure that the blood volume has been restored preoperatively.

The compensatory mechanisms and local capillary flow changes of cardiogenic shock are similar to those of shock from hypovolemia. A deficiency of nutritive capillary flow is the basic pathophysiologic defect in both types of shock. A low arterial blood pressure results from a decrease in cardiac output due to deficient ventricular contractile force. A compensatory adrenergic response, clinically indistinguishable from that of hypovolemia, occurs with an increase in peripheral vascular tone and a further decrease in capillary flow. Whereas the patient with hypovolemic shock usually has a decreased central venous pressure, the patient with cardiogenic shock cannot propel his adequate blood volume through the heart, resulting in an overloading of the capacitance vessels and increase in the central venous pressure. It is extremely important to differentiate cardiogenic shock from hypovolemic shock or to detect a cardiogenic element to hypovolemic shock. Whereas rapid fluid administration is essential to the correction of shock in the patient with hypovolemia, it may be the coup-de-grace to the patient with cardiogenic shock.

Recent evidence indicates that acidosis is usually the result rather than the cause of the failing circulation in human shock and indicates that clinical acidosis is rarely a potentiating factor in shock.[33-35]

Initial Management of the Patient in Shock

The patient in shock offers a unique clinical challenge. There are few areas in medicine in which prompt and resourceful treatment is more liberally rewarded or where delays and mistakes can lead to such tragedy. Proper care of these patients demands mature judgment, prompt action and a conditioned awareness of priorities of treatment.

Physician Attitude. One of the most important factors in survival of the hypovolemic patient is the degree of urgency with which the physician evaluates and treats his shock. A sense of compulsive urgency or an urgent sense of compulsion is mandatory if one is to treat shock successfully. Patients don't live in shock. The natural course of the disease is that of progressive deterioration and death unless the cause is reversed by adequate treatment. A direct relationship between the duration and severity of shock and survival exists. If treated promptly and adequately, most patients will recover from a 40 - 60% hemorrhage without sequelae. If therapy is delayed, the same patient will die from a lesser hemorrhage, especially if he is aged or has associated problems. Treatment of these patients cannot wait. The cause of the shock and any contributing factors must be rapidly assessed and treatment must be initiated and sustained until the casual factors are controlled. A physician who is not willing to exercise the degree of dedication necessary to provide this type of care should not assume responsibility for acutely ill patients.

Monitoring. Since shock is a dynamic condition which is either improving or worsening, it is important that the circulatory system be monitored during evaluation and treatment. The cardiac output, peripheral vascular tone, capillary flow (tissue perfusion) and blood volume are of special interest. Although numerical values can be derived using elaborate electronic equipment, adequate approximations of these values can be obtained and most patients can be successfully treated using only the equipment available on any nursing station provided the physician understands the disease.

The best way to follow the severity of shock and to determine the adequacy of treatment is to examine the patient repeatedly. The clinical signs and symptoms of shock appear sequentially and disappear in the reverse order with adequate treatment. The first sign of hypovolemia will usually be oliguria. Signs and symptoms of more severe oligemia proceed from poor peripheral venous fill to pallor, tachycardia, diaphoresis, agitation, thirst, hypotension, dyspnea, confusion, cyanosis, coma and death.

A good approximation of the adequacy of the myocardium can be made from the strength of the pulse and the arterial pressure. Although a normal myocardium will not be able to maintain a strong pulse in the presence of severe hypovolemia, a strong pulse and normal blood pressure indicates that the myocardium is functioning adequately, that the cardiac output is sufficient and excludes the diagnosis of cardiogenic shock.

The status of the peripheral vascular tone is best determined by examining the patient's skin and mucous membranes. Coldness and pallor of the skin indicate vasoconstriction from an alpha adrenergic sympathetic response. Accompanying signs are piloerection and iris dilatation, also alpha-adrenergic responses and sweating, a cholinergic sympathetic response. Cyanosis indicates more deficient perfusion and capillary stasis. The change of color of the ocular conjunctivae may be more noticeable than skin color change, especially in pigmented patients.

The urinary output is a very sensitive indicator of the adequacy of the blood volume and should be followed closely. An indwelling urinary catheter should be inserted and the urinary output recorded every 15 minutes. In adults with normal renal function, a urinary output of about 50 ml. per hour is an indication of adequate renal perfusion and can be assumed to indicate adequate perfusion to other tissues as well. Small deficits in blood volume are followed promptly by oliguria before other clinical signs appear. A urinary output of less than 30 ml. per hour is a cause for concern since it may indicate renal ischemia and is usually an indication to alter treatment to improve renal perfusion. Vasopressors and diuretics falsely elevate urine output and deprive the physician of this valuable guide to the treatment of hypovolemia.

There are various means of measuring blood volume numerically, usually by the use of radioisotopes. These methods are cumbersome, expensive, time consuming and the determinations are subject to the errors inherent in the use of complex equipment and the problems of availability of trained personnel. Since patients being actively treated for shock usually have had significant fluid losses and replacement between the time the blood volume determination is made and the values are available for interpretation, numerical blood volume results usually are obsolete before they can be used and are rarely of clinical value.

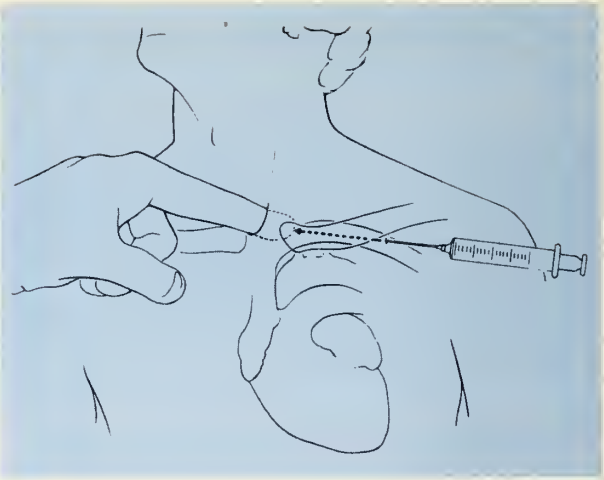

Figure 2. Technique of percutaneous subclavian venapuncture (see text).

Central venous pressure monitoring is a simple and reliable means of determining the adequacy of the blood volume and has been extremely valuable in the management of volume replacement in a variety of clinical situations. The results are immediately available and the determination can be repeated frequently. More importantly, this monitoring device determines that aspect of blood volume which is most important to the physician, i.e., the relationship of the effective circulating blood volume to the adequacy of the myocardium. Knowing this relationship allows the clinician to distinguish cardiogenic shock from hypovolemia, and to determine whether or not the patient can tolerate more fluid. We really do not need to know the numerical blood volume. We only need to know if the patient can tolerate more fluid or if more fluid will be apt to put him into congestive failure and pulmonary edema. Central venous pressure monitoring will allow this determination. Radioisotopic blood volume determinations will not.

Technique of Central Venous Pressure Monitoring. Patients with manifest or imminent shock regardless of the cause should have a catheter placed in an intrathoracic vein and the central venous pressure monitored. We usually accomplish this by percutaneous subclavian venipuncture[36-39] although percutaneous internal carotid venipuncture seems completely satisfactory.[40,41]

With the patient recumbent, the skin of the upper chest and base of the neck is carefully prepared and draped. The patient is placed in the Trendelenburg position (one of the few uses of this position) to distend the subclavian veins. A finger is placed in the suprasternal notch and a large needle, usually attached to a syringe, is passed horizontally just below the clavicle, aiming for the tip of the finger over the sternum (**Figure 2**). The direction of the needle is usually perpendicular to the long axis of the patient but occasionally is aimed slightly more cephalad. When the vein is entered, blood is withdrawn for necessary laboratory determinations. A catheter is threaded through the needle into an *intrathoracic* vein. Peripheral venous pressure is misleading and of no value in determining shock therapy.[37] Care must be taken to prevent air embolism during removal of the syringe and passage of the catheter. Radiopaque catheters are preferred so the position of the catheter can be determined on subsequent X-rays. If radiopaque catheters are not available the position of the catheter can be checked by filling the catheter with a small amount of radiopaque contrast material and obtaining a chest X-ray. It is important to position the tip of the catheter in the superior vena cava two to three cms. above the heart. If the catheter rests in the heart, arrhythmias may result or cardiac contraction may cause an erosion of the myocardium by the catheter tip with pericardial tamponade and death.[42-44] The catheter is connected to tubing containing an electrolyte solution and attached to a manometer via a three-way stop cock.

Passage of the catheter through peripheral cutdowns or venipunctures is more time consuming and, if the catheter is to remain in place for some time, is associated with a higher rate of suppurative thrombophlebitis. The cephalic and external jugular veins enter the subclavian vein at angles which frequently will not allow passage of the catheter. Therefore, these veins should not be used for central venous catheterization if other veins are available. Because of the excessively high rate of deep thrombophlebitis and its sequelae associated with intravenous infusions in the legs, leg veins are not satisfactory routes for central venous pressure monitoring.

Sepsis is one of the most common complications of indwelling intravenous catheters.[45-47] It is essential that these catheters be passed under aseptic conditions and that the skin around the catheter be kept sterile. Frequent skin cleansing, the application of antibacterial ointment, and frequent sterile dressing changes are important.

Serious complications of subclavian venipuncture such as pneumothorax, hemothorax, hydrothorax, brachial plexus injury and subclavian artery puncture, although very infrequent, are the result of performing the catheterization improperly, usually from introducing the needle with too great a posterior angulation.[37,48]

Special care should be taken to prevent shearing off the intravenous catheter with resultant catheter embolization.[49] This usually occurs while attempting to position a catheter inserted through a needle while the needle is still in the vein. The catheter is withdrawn with the needle still in place (a maneuver which should *never* be done!) and the catheter is transected by the needle point. The incidence of breakage and embolization of catheters after their insertion can be reduced by suturing the catheter to the skin or using a catheter with a flange for receiving the intravenous tubing attached as an integral part of the catheter.

The possible complications of central venous catheterization and subclavian venipuncture should not discourage the appropriate use of these valuable techniques. They are listed here to emphasize the need for caution and proper technique in carrying out this extremely useful diagnostic procedure. There are very few worthwhile means of diagnosis and treatment which do not carry a risk if used improperly. With such forewarning, we believe that any physician can easily and repeatedly catheterize central veins with few problems.

Consistency in positioning the manometer is of prime importance. A mark should be made with a pen or marking pencil at the midaxillary line and this mark used repeatedly as the zero reference point for determining the venous pressure. The head of the bed is lowered until flat and respirators, which cause a flasely high reading, should be momentarily disconnected. The manometer is filled to the top with an electrolyte solution, all bubbles are run out of the system, the stop cock is turned and the fluid allowed to find its level. If the catheter has been inserted recently, the fluid will fluctuate with respirations, assuring that the tip is in an intrathoracic vein. After a few days, a thrombus and fibrin sleeve forms around the catheter and may interfere with this fluctuation but does not interfere with the continued use of the catheter for fluid administration or venous pressure measurements.

Naturally, the value of the central venous pressure monitoring is dependent upon proper interpretation of the reading. One must remain aware that the central venous pressure is of value only in indicating whether or not the patient's heart and pulmonary circulation are capable of handling the fluid volume already in the vascular system. It will not indicate whether the patient's blood volume is higher or lower than normal. If the midaxillary line is used as the zero reference point, the normovolemic patient will have a central venous pressure of three to eight cms. of water. If the central venous pressure is normal or low, fluid can be administered safely but should be administered only if other signs indicate the need. One should not use a seemingly low central venous pressure *per se* as in indication for fluid administion. If the central venous pressure is high, one of three situations prevails; (1) too much fluid has been administered, (2) the myocardium is failing or (3) there is pulmonary interstitial edema. In any case, the patient will not tolerate more fluid.

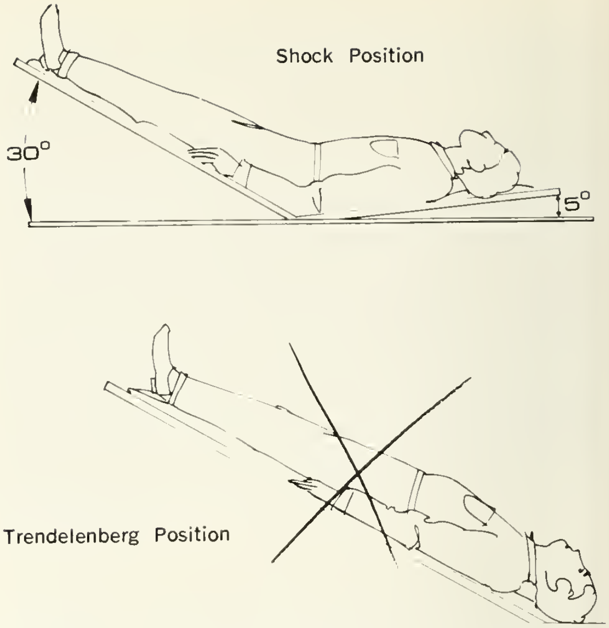

Figure 3. The shock position speeds venous return from the legs thereby improving cardiac output during the resuscitative period of shock therapy. The Trendelenburg Position accomplishes the same thing but, because it impairs respiration and cerebral perfusion, should not be used.

Treatment of Shock

Fluid Therapy. In shock from hypovolemia, normal capillary perfusion can be restored most effectively by rapid blood volume expansion. Replacement fluid should approximate the type and amount of fluid lost. Whole blood loss is best treated by whole blood replacement in equal amounts. Unfortunately, it takes 45-60 minutes to obtain crossmatched whole blood. Since patients frequently will not tolerate such delays without irreparable sequelae, emergency resuscitation must be started with other methods of blood volume expansion.

The shock position (**Figure 3**) with the trunk and head elevated five degrees and the legs elevated 30 degrees will allow more rapid return of venous blood from the extremities which, in effect, constitutes an internal transfusion of several hundred milliliters. The Trendelenburg position (head down, legs up, hips straight) accomplishes the same thing but impairs cerebral perfusion, interferes with respiration and should not be used.

Since position alone, although helpful, is not sufficient to restore normal capillary perfusion, emergency resuscitation areas must be kept stocked with satisfactory blood substitutes for use until whole blood can be obtained. These substitutes must be safe and effective and should be relatively stable, easy to store and inexpensive.

The use of the dextrans as emergency blood substitutes has been the subject of intensive laboratory and clinical investigation recently summarized by Atik.[50] Six percent Dextran 70 (clinical Dextran; average molecular weight 70,000), by virtue of its colloid (oncotic) osmotic effect, is capable of expanding the blood volume for over five hours. Low molecular weight dextran (Dextran 40, Rheomacrodex) has an average molecular weight of 40,000. It contains more molecules than Dextran 70, thus is more osmotically active. However, the small molecular fractions pass through semipermeable membranes rapidly and the fluid expanding properties are more transient than those of Dextran 70. Dextran 40 has the added advantage of reducing the viscosity of whole blood when it is abnormally high, as in clinical shock, which improves tissue perfusion.

The dextrans must be used with caution. Severe allergic reactions have occurred. Although they are relatively safe if administered in the recommended dose of 10-15 ml./Kg body weight, higher concentrations will interfere with the clotting mechanism and cause abnormal bleeding. This volume restriction severely limits the usefulness of the dextrans in hypovolemic shock.

Hydroxyethyl starch seems to possess properties appropriate for an emergency plasma substitute. It remains in the intravascular space longer than the dextrans, interferes less with coagulation, is stable in solution and is eliminated from the body without significant tissue storage reactions.[51] Although allergic reactions have been reported they are infrequent.[52] Widespread clinical use of this material as a plasma expander must await more clinical experience.

Ringer's lactate solution is free of the disadvantages of the above solutions and is our choice for rapid volume replacement in hypovolemic patients when blood is needed but not available. This solution is readily available, is stable indefinitely, needs no refrigeration, is pyrogen free, causes no allergic reactions, does not interfere with the clotting mechanism, is inexpensive and, most importantly, is effective.[8,53-55] Rapid infusion will restore circulating blood volume and capillary perfusion and will decrease the eventual blood requirement.[56] Because Ringer's lactate contains no protein, there is a potential risk that dilutional hypoalbuminermia will occur after rapid infusion followed by a rapid exit of the solution from the vascular space with resultant interstitial edema. However, serum albumin is not significantly lowered following mild hemorrhage and rapidly returns to normal after massive hemorrhage treated with protein-free electrolyte solutions.[8,57] This indicates that albumin enters the vascular space after hemorrhage, thereby maintaining plasma oncotic pressure. Clinical studies have shown that, if care is taken to prevent iatrogenic fluid overload, peripheral and pulmonary interstitial edema do not occur when hemorrhage is treated by protein-free electrolyte solutions.[8]

Since the serum electrolyte concentration is not significantly altered by acute hemorrhage, the fluid used for early resuscitation should have an electrolyte concentration similar to plasma. Lactated Ringer's solution meets this criterion.

Some surgeons have been concerned that the hepatic threshold for metabolizing lactate may be overcome by large volume infusions of lactate containing solutions, causing lactic acidemia and rendering the blood lactate levels useless. Clinical studies now show that this does not occur.[53]

Because of the logistical delays in obtaining whole blood when patients are admitted in shock from hemorrhage, most of our patients receive 2,000 to 4,000 ml. of Ringer's lactate before typed specific or cross-matched whole blood is available. This allows us to resuscitate the patient and reduces the amount of whole blood administered, thereby reducing the risk of transfusion reactions and hepatitis. The resultant post-therapy anemia usually requires no treatment.

Although blood plasma would seem to be an ideal solution for the emergency correction of hypovolemia because of its protein content, the risk of hepatitis and problems of storage preclude its use. Furthermore, patients receiving protein containing solution do not have significantly higher total protein or albumin levels after treatment than patients receiving electrolyte solutions without protein.[58]

The type of fluid used in the treatment of shock from plasma loss depends upon the previous condition of the patient and the relative concentrations of serum electrolytes. However, several generalizations can be made. Hypovolemia from repeated vomiting often causes hypochloremic alkalosis with resultant hypokalemia. Replacement fluids should be high in chloride, e.g., normal saline, with added potassium chloride. Most other types of lost or extravasated fluids have an electrolyte concentration similar to plasma. If so, lactated Ringer's solution is usually the replacement fluid of choice. If there are high protein losses such as with granulating wounds, peritonitis, pancreatitis, soft tissue trauma, etc., albumin may be added to the replacement fluid.

If there is a combination of blood and fluid lost as with significant soft tissue injuries after automobile accidents, both Ringer's lactate and whole blood will be needed. It must be remembered that the fluid sequestered in injured or inflamed tissues is released into the venous capillaries as the tissue heals. Several days later this reabsorption of fluid may equal or exceed the patient's daily fluid requirement and may cause *hyper*volemia. This reabsorption should be anticipated and fluid therapy altered accordingly.

The amount of fluid necessary to restore a normal hemodynamic state equals the loss and usually is impossible to measure accurately. Adequate replacement can be determined only by the clinical response of the patient.

The first indication that the patient will need fluid therapy may be an appreciation of the severity of the patient's disease. A badly injured patient or a patient with severe peritonitis is going to require fluid. The alert physician will anticipate these requirements and begin fluid therapy promptly, often before the clinical signs of shock appear. The more proficient a physician is in the treatment of shock, the less shock he will see. His patients will endure less hypovolemia for shorter periods of time and will reap the benefit in decreased morbidity and mortality.

With adequate therapy, the signs and symptoms of shock abate in the reverse order in which they appear. Since most patients will maintain a normal arterial blood pressure with a one liter blood volume deficit, a normal arterial blood pressure cannot be used as the end point of transfusion therapy; such a patient may still be in shock. The hematocrit is rarely of value in the initial treatment of shock since the blood loss usually occurs much more rapidly than the body's ability to replace the blood volume with extracellular fluid. Other means of judging the adequacy of fluid replacement are, therefore, necessary.

After estimating the relative proportions of crystaloid and colloid solutions needed, fluid should be administered rapidly while observing the patient, monitoring the urinary output and central venous pressure and auscultating the chest repeatedly until one of three things happens.

1. The signs and symptoms of shock disappear and the urinary output returns to normal. This is the usual and hoped for goal and indicates satisfactory re-establishment of a normal blood volume.

2. The central venous pressure rises to greater than 10 cm. of water indicating imminent fluid overload. If this occurs prior to the disappearance of the signs and symptoms of shock, it implies that the shock is at least partially of cardiogenic origin and that fluid replacement must be stopped while efforts are made to improve cardiac output by increasing the strength of ventricular contraction. This may require intravenous Isuprel (a potent Beta stimulator which must be administered cautiously to prevent excessive tachycardia) or intravenous digitalis (especially useful in patients with pre-existing cardiac disease or in patients with a pulse greater than 120 per minute).
3. Rarely, pulmonary edema occurs, signifying an excessive accumulation of fluid in the pulmonary interstitial space, perhaps, from pulmonary contusions or congestive atelectasis but frequently compounded by excessive fluid administration. This usually, but not always, will be accompanied by an increased central venous pressure. A stethoscope is indispensable in shock therapy.

Central venous pressure monitoring is most useful in preventing over transfusion during the rapid administration of fluid to patients who will tolerate fluid excesses poorly. As long as the central venous pressure is not elevated and the chest is clear, fluid can be administered as rapidly as desired without fear of fluid overload. When the central venous pressure rises, the blood volume is approaching the maximum that can be tolerated by the heart and the rate of administration must be decreased. This is the only role of central venous pressure monitoring. The currently popular practices of using a low central venous pressure reading as an indication for fluid therapy or insisting upon raising the central venous pressure above normal (indicating borderline congestive failure) before slowing the rate of fluid administration should be avoided. The central venous pressure monitoring device is not like a fuel gauge; it will not indicate when a patient is a quarter full or three-quarters full! It will only tell the physician when the patient is *too* full and warn him against further fluid administration.

Vasopressors. Although vasopressors have been used extensively in the treatment of hypovolemic shock, convincing evidence of their clinical efficacy is lacking. Studies of anesthetized animals have shown the detrimental effect of hypotension on coronary artery[16,19,29-32] and renal artery[30,59-61] flow, and the salutary effects of the artificial elevation of arterial blood pressure by vasopressors in this setting.[11,29,31,32,60-62] Our results from the use of metaraminol in the anesthetized pig in hemorrhagic shock support these findings.[24]

Unfortunately, some authors have assumed that vasopressors have a similar effect in *nonanesthetized humans* and have advocated vasopressors in the treatment of clinical shock. This assumption fails to consider the variables introduced by anesthesia, the reports of the detrimental effects of vasopressors,[63-70] the role of catecholamines in preventing re-expansion of the blood volume after hemorrhage[67] and the evidence indicating that plasma catecholamine levels are already elevated in shock.[9,71,72] Our studies indicate that a 40% hemorrhage does *not* adversely affect myocardial perfusion[12] and that therapeutic amounts of metaraminol after hemorrhage *decreases* myocardial perfusion and renal capillary blood flow in the nonanesthetized animal.[24] We are not aware of any data which demonstrate that vasopressors improve capillary perfusion in nonanesthetized humans.

The ischemic insult of acute hypovolemia with profound hypotension frequently has its most serious and lasting effects on the central nervous system. Vasopressors may have an important role in maintaining cerebral perfusion following acute, massive hemorrhage in those few moments before blood volume replacement can be begun. Similarly, vasopressors may help overcome the loss of peripheral vascular tone which accompanies acute cardiac arrest, thereby shortening the period of profound hypotension. Although logical, these popular hypotheses are not substantiated. We must know the effect of graded hypotension and vasopressors on cerebral *perfusion* before the usefulness of vasopressors in profound hypotension is accepted. In practice, we do not use vasopressors except in the first few minutes after cardiac arrest and in the anesthetized patient in profound hypovolemic shock before blood volume can be replaced.

Alkalinizing and Buffering Solutions. The cellular anoxia of hypovolemic shock invariably interferes with aerobic metabolism and causes some degree of metabolic acidosis. The fear that this acidosis will interfere with cardiovascular function and, therefore, needs specific treatment seems to be unjustified. Collins and co-workers have summarized the published data on the role of acidosis in shock and have confirmed it in their clinical studies.[34] Most patients whose hypovolemic shock responds to fluid therapy will rapidly reverse the metabolic acidosis without specific therapy and regardless of the magnitude of the acidosis. Furthermore, most patients will have no difficulty from the infused acid load of stored blood.

Patients who demonstrate persistent metabolic acidosis and lactic acidemia after treatment usually have continued hemorrhage and shock or have such extensive ischemic damage that survival is unlikely. Administration of alkali to such patients is usually without effect even when the acidosis is reversed.

Metabolic defenses against acidosis are less efficient during hypothermia, in the newborn and in patients with impaired liver function or with preexisting myocardial disease. The normal defense mechanisms may be overwhelmed by sustained transfusion therapy exceeding one unit of banked blood every four to six minutes. Under any circumstances, however, it is unlikely that clinical acidosis significantly affects cardiovascular function or that patients responding favorably to transfusion therapy will require pharmacologic manipulation of their acid-base balance.[33-35] Routine administration of alkalinizing solutions during rapid or sustained blood transfusions may cause hypocalcemia, ventilatory depression, increased urinary potassium losses and decreased oxygen transport.[34] If alkalinizing or buffering solutions are considered in patients who are not responding well to transfusion therapy, their use should be based on objective measurements of the acid-base status and should be accompanied by the cautious administration of calcium.

Operative Therapy. Occasionally, it becomes evident that the patient is losing blood as rapidly as it is being administered and that re-establishment of normal circulatory dynamics by rapid fluid administration is not going to be successful. If so, immediate operation is necessary to obtain hemostasis. Once the bleeding organ is exposed, hemostasis should be accomplished as expeditiously as possible, usually by simple suture or tamponade until the blood volume can be restored and definitive surgical correction carried out with the patient normovolemic.

Summary

Most patients with hypovolemic shock are best treated by adequate fluid replacement. The pathophysiology of shock is discussed. Methods of bedside patient monitoring to determine the adequacy of fluid replacement are emphasized.

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MICHIGAN
DEPARTMENT
OF PUBLIC
HEALTH

Monthly Surveillance Report

Cases of Certain Diseases Reported
To the Michigan Department of Public Health

For the Four-Week Period Ending November 26, 1971

	1971 This 4-Week Period	1970 Same 4-Week Period	1971 Total To Above Date	1970 Total Same Date	Total Cases for 1970
Rubella	85	104	2,854	2,883	3,012
Congenital Rubella Syndrome	0	0	1	0	2
Measles	96	34	2,523	1,798	1,834
Whooping Cough	9	7	132	187	195
Diphtheria	—	—	—	—	—
Mumps	375	937	10,124	6,394	7,825
Scarlet Fever & Strep Sore Throat	826	958	9,941	10,265	11,863
Tetanus	1	2	3	8	8
Poliomyelitis (paralytic)	0	0	0	1	2
Hepatitis	381	331	4,388	4,153	4,594
Salmonellosis (other than S. typhi)	64	51	634	596	665
Typhoid Fever (S. typhi)	0	0	7	12	14
Shigellosis	32	20	229	194	225
Aseptic Meningitis	17	21	208	284	296
Encephalitis	7	8	100	142	155
Meningococcic Meningitis	2	4	59	65	69
H. Influenza Meningitis	8	12	75	51	61
Tuberculosis	136	143	1,706	1,786	2,006
Syphilis	459	309	4,134	3,458	3,900
Gonorrhea	2,035	1,397	19,949	18,506	20,676

Information can be supplied by the local health department on the local incidence of disease.

Maurice Reizen, M.D., Director
Michigan Department of Public Health

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Perinatal Tips

By Paul M. Zavell, MD
Detroit

The following case from the files of the Wayne County Medical Society Perinatal Mortality Committee is presented as an aid in continuing education.

Maternal

This was the first pregnancy for a 23 year old, white O+ mother. Her pregnancy had been uneventful and she had received regular prenatal care. At term she went into labor and delivered a 5 lb. 8 oz. female infant in eleven hours. The mother had a negative VDRL.

Fetal

At birth this infant was in a depressed state with a cord around the neck. Initial resuscitation efforts were not successful (though vigorous) so that it was necessary to intubate her and later use a Bennett respirator. The heart rate varied from 100-120 per minute.

When first seen by the pediatric staff (30 minutes later) the infant was cyanotic and still not breathing spontaneously. Breath sounds were heard poorly on the left side and none were noted on the right. Thinking this might be respiratory distress, sodium bicarbonate 8cc as a direct push followed by 50% glucose water were instilled via the umbilical vein. No improvement was noted. A chest film revealed a massive right-sided tension pneumothorax which was immediately relieved by direct needle aspiration so that respirations immediately improved. Shortly thereafter a catheter was inserted into the right chest. The infant's color became excellent and she now breathed normally. The endotracheal tube was removed shortly thereafter without difficulty.

On the second day of life she weighed 5 lbs. 4 ozs. and was generally doing well. Only minimal amounts of air were recovered following thoracotomy drainage so that it was possible to remove the tube successfully 48 hours later. The infant's course was completely uneventful thereafter and she was discharged home on the fifth day.

Perinatal Committee Comments

1. This case nicely stresses the truth of the statement that not all babies having respiratory distress have the true respiratory distress syndrome. That is, respiratory distress may be due to CNS, cardiac, respiratory, hematologic, or other problems and not due primarily or only to "hyaline membrane disease."

2. Whenever an infant is having respiratory distress symptoms, a chest X-ray should be done to rule out possibilities other than respiratory distress symptoms (such as a pneumothorax here).

3. Not all pneumothoracies need treatment but tension pneumothorax does (indeed, treatment is life-saving here).

Doctor Zavell is chairman, Neo-Natal and Hospital Care Committee, Michigan Chapter, A.A.P.; and chairman, Perinatal Mortality Study Committee, Wayne County Medical Society.

COMPLICATIONS OF SPLENECTOMY

By Robert D. Allaben, MD
William S. Carpenter, MD
Paul J. Connolly, MD
Angelos A. Kambouris, MD
Detroit

The incidence of complications following splenectomy has been variably reported from 30% to 90%. The frequency has been related to the indications for the procedure, to coexisting diseases or to specific technical factors.[1,2,3,4,5] Although splenectomy is a relatively common operation, there are only sporadic reports relative to the associated morbidity and mortality and little information about the reasons for its performance.

In order to evaluate the incidence and type of such complications, the authors reviewed their personal experience with 50 consecutive splenectomies performed from 1964 to 1969.

Materials

The records of 50 consecutive patients who underwent splenectomy by the authors in three private hospitals in Detroit were thoroughly analyzed. Emphasis was placed on the type of underlying disease, the intraoperative and postoperative course and the type and seriousness of the complications.

There were 30 female and 20 male patients. Their ages varied from eight to 84 years with a median of 53.5 years. Forty-seven patients were Caucasian and three were Negroes. Indications were divided into four categories (**Table I**).

As a primary procedure, splenectomy was performed through a left subcostal incision. Frequently a drain was left in the splenic bed and removed between the second and seventh postoperative day. Gastric decompression by nasogastric suction was employed selectively; early ambulation and bronchopulmonary care were instituted immediately after operation. Frequent platelet counts were obtained and anticoagulation was instituted when platelets exceeded one million/cu.mm.

Table I Indications for Splenectomy

Group	Indication	No. Pts.	%
1.	Hematologic	22	44%
2.	Incidental to Major Operations	13	26%
3.	Iatrogenic Trauma	11	22%
4.	External Trauma	4	8%
	Total	50	100%

Complications were classified as follows:

a. *Pulmonary* such as atelectasis, pneumonitis, pleural effusion or empyema.
b. *Subphrenic* abscess and collection at the area of the splenic bed.
c. *Miscellaneous* including peritonitis, bleeding and thrombotic episodes.

Results

1. Hematologic Disorders:

Twenty-two patients underwent splenectomy for hematologic diseases (**Table II**). The largest spleens removed weighed 1907 gms. (for lymphoma) and 1930 gms. (for hypersplenism).

Complete hematologic evaluation and oftentimes prolonged specific treatment, including steroids and immunosuppressive drugs, had preceded operation in all instances. Four patients had platelets of less than 30,000/cu.mm. and in two the platelet level was below 10,000/cu.mm. Although no platelets were administered preoperatively, none of these patients exhibited abnormal bleeding during or following the procedure. Likewise post-splenectomy thrombocytosis of 500,000 to 750,000/cu.mm. developed in eight patients (36%), but no clinical thrombotic episodes were observed. Fifteen patients had been on long-term steroid therapy; appropriate dose adjustment prevented episodes of adrenal insufficiency and all wounds healed primarily. Accessory spleens were found in six patients (27%). In one instance three accessory spleens were removed 30 years following splenectomy for acquired hemolytic anemia. The splenic bed was drained in eight patients (36%). No complications related to the drain were encountered.

As indicated in **Table II**, atelectasis in two patients and pneumonitis in one were the only complications in this group. All but three patients

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The authors are associated with Harper Hospital, Mt. Carmel Mercy Hospital and Sinai Hospital, all in Detroit.

Table II Complications of Splenectomy for Hematologic Disease

Primary Disease	No. Pts.	Complications A	Complications B	Complications C	Deaths
Idiopathic Thrombocytopenic Purpura	6	0	0	0	0
Hypersplenism	5	2	0	0	0
Felty's Syndrome	4	0	0	0	1
Acquired Hemolytic Anemia	4	0	0	0	1
Leukemia-Lymphoma	2	1	0	0	0
Gaucher's Disease	1	0	0	0	0
Total	22	3(14%)	0	0	2(9%)

A. Bronchopulmonary
B. Subphrenic
C. Miscellaneous

Table III Complications of Splenectomy Incidental to Major Operations

Primary Operations	No. Pts.	Complications A	Complications B	Complications C	Deaths
Esophagogastrectomy	8	6	1	0	3
Pancreatectomy	3	2	0	1	1
Colectomy	1	0	0	0	0
Splenorenal Shunt	1	0	0	0	1
Total	13	8(62%)	1	1	5(38%)

A. Bronchopulmonary
B. Subphrenic
C. Miscellaneous

were discharged by the fifteenth postoperative day. One patient remained longer because of an eye infection associated with Felty's syndrome. Two patients died in the hospital from septic processes not related to the splenectomy; one on the forty-ninth postoperative day from sepsis incident to immunosuppression for treatment of hemolytic anemia, the other on the sixty-eighth postoperative day from sepsis secondary to extensive decubitus ulcers associated with Felty's syndrome.

2. Splenectomy Incidental to Major Operations:

In 13 patients the spleen was removed as a normal part of another definite procedure (**Table III**). In eight instances the spleen was removed in the course of resective procedures for gastric or esophageal carcinoma. In three it accompanied distal pancreactomy. Subtotal colectomy for carcinoma attached to the splenic capsule and splenorenal shunt were indications for splenectomy in the remaining two patients. Penrose drains were placed in the left upper quadrant in 11 instances. Severe bronchopulmonary complications developed in eight patients (62%) and subphrenic abscess due to an anastomotic leak occurred in one instance. Asymptomatic thrombocytosis of 650,000/cu.mm. was encountered only once. There were five hospital deaths in this group, all related to the extent of the operation and/or the underlying disease; none could be directly attributed to splenectomy (**Table IV**).

3. Iatrogenic Trauma:

Splenectomy was performed in 11 patients for accidental injury in the course of operations in the upper abdomen (**Table V**). Five injuries occurred in the course of subtotal or total gastrectomy, three in the course of vagotomy, two while repairing esophageal hiatus hernias and the last during left colectomy for carcinoma. Four patients (36%) in this group developed serious bronchopulmonary complications; three of them expired, while the fourth recovered after closed thoracotomy drainage for tension hydropneumothorax. Subphrenic abscess as part of upper abdominal sepsis was encountered in two patients. A duodenal fistula was considered the source in one, but no obvious source could be found in the other patient. This second patient, a cirrhotic with upper gastrointestinal hemorrhage developed subphrenic abscess which progressed to diffuse peritonitis associated with ascites and died 30 days following vagotomy and hemigastrectomy.

Ileus of short duration was recorded in six of the seven patients who had an uncomplicated recovery and in three of the four who expired.

Focal pancreatitis of no clinical significance was found at autopsy in two patients (cases 9 and 11). One (case 9) died of acute pulmonary edema four days after attempted vagotomy for bleeding peptic ulcer. The other patient (case 11) died 42 days after total gastrectomy for recurrent hemorrhagic gastritis and after multiple septic and cardiopulmonary complications.

The splenic bed was drained in eight patients in this group. No complications were directly related to the drain. Underlying diseases of serious nature (cases 8,11) and serious technical problems (cases 6,10) accounted for the complications and

Table IV Fatal Complications in Group 2

Age/Sex	Primary Procedure	Fatal/Complication	Day of Death Post op.
52,M	Proximal Gastrectomy	Leak, Empyema	9
84,F	Proximal Gastrectomy	Myocardial Infarction Pulmonary edema	6
57,F	Esophagogastrectomy and Colon Interposition	Leak, Empyema	12
53,M	Splenorenal Shunt	Liver failure	15
60,M	95% Pancreatectomy	Myocardial Infarction	3

Table V Complications and Deaths in Patients with Accidental Splenic Injury

							Complications				
No.	Age Sex	1° Disease	Procedure	Incision	Injury	Drain	A	B	C	Outcome	Comments
1.	83,M	Ca. Stomach	Gastrectomy	Midline	Splenic Tear	+	0	0	Ileus	Recovered	
2.	62,F	Gastric Polyps	"	"	"	—	0	0	"	"	
3.	65,F	Leiomyoma, Stomach	Excision, Pyloroplasty	"	"	+	0	0	"	"	
4.	69,M	Bleeding Gastritis	Gastrotomy	Transverse	"	+	0	0	"	"	
5.	66,F	Cholelithiasis Hiatus hernia	Cholecystectomy Hernia repair	Right subcostal	"	+	0	0	0	"	
6.	69,F	Recurrent hiatus hernia	Hernia repair Suture of Esophagus	Midline	Tear of esophagus	+	Hydro-pneumothorax	0	Ileus	"	Closed Chest Drainage
7.	72,F	Ca, Left Colon	Left Colectomy	Lt. Para-Median	Splenic Pedicle Tear	+	0	0	"	"	
8.	59,F	U.G.I. Bleeding Cirrhosis	Vagotomy Hemigastrectomy	Midline	Splenic Tear	—	0	Abscess	Peritonitis Ascites	Expired	30th p.o. day
9.	63,M	Bleeding Peptic Ulcer	Attempted Vagotomy	"	"	+	Pneumonitis Effusion Pulm. edema	0	Ileus	"	4th p.o. day Tail Pancreatitis at Autopsy
10.	76,M	U.G.I. Bleeding on ACTH	V+P Suture Esophagus	"	Splenic Esophageal Tear	—	Effusion A-C block	0	Ileus	"	16th p.o. day
11.	75,M	Bleeding Gastritis	Total Gastrectomy	"	Splenic Tear	+	Bronchopneumonia Congestive Failure	0	Duod. Fistula Abscess Wound Dehiscence	"	42nd p.o. day had V+P 2 wks. preop. Autopsy: Focal Pancreatitis

probably the fatal outcome. Although no death could be directly attributed to the splenectomy, there is little doubt that the additional procedure prolonged the operating time, increased the operative and postoperative stress, and added to the postoperative morbidity.

4. External Trauma:

Of the four patients in this category (**Table VI**) two sustained fractures of the left rib cage in automobile accidents; another was injured falling off a a stepladder and the last received a direct blow with a baseball bat. Splenectomy was performed through a left subcostal incision in three, through a midline incision in the other. The splenic bed was drained in three instances and no related complications developed. Mild transient ileus was recorded in all patients. One patient with multiple rib fractures developed a transient left pleural effusion and thrombocytosis of over 1 million/cu.mm. She was treated with anticoagulants and discharged the twenty-sixth postoperative day. Asymptomatic thrombocytosis of 610,000/cu.mm. was observed in the other patient with rib fracture but no anticoagulants were used; he was discharged on the eighth postoperative day.

Discussion

A. Complications:

Very few complications developed following splenectomy for hematologic diseases. All three pulmonary complications were minor, in spite of pre-existing illness of long standing, of significant hematologic deviations and of prolonged use of steroids. Splenectomy for isolated splenic trauma was also associated with minimal morbidity. The only complication occurred in one patient with fractured ribs and was probably related to the associated injury.

All subphrenic abscesses occurred in instances where the gastrointestinal tract had been entered.

Table VI Complications of Splenectomy for External Trauma

Age/Sex	Injury	Drain	Complications A	B	C	Day of Discharge	Comments
62,F	Auto Accident, Rib Fractures	+	Effusion	0	+	26th	Platelets over 1,000,000mm^3 Anticoag. Rx.
36,M	Auto accident Rib Fracture	+	0	0	+	8th	Platelets$_3$ 610,000mm no Rx
23,M	Fall	—	0	0	0	7th	
12,M	Direct Injury	+	0	0	0	8th	

None of eight patients in group I (hematologic) and of three patients in group IV (trauma) where clean splenectomies were drained, developed wound infection or subphrenic abscess. This tends to refute the contention that drains lead to wound or subphrenic spaced infection.[5] We are currently using drains only selectively and remove them by the fourth postoperative day unless a pancreatic injury is suspected or recognized, when drainage may be necessary for longer periods. We agree with Daoud, et al.,[7] that patients have equal chance for infection whether drains are used or not and that special circumstances dictate the use of drtins.

The high incidence of complications and deaths in group II (incidental) reflects the seriousness and the extent of the primary operations and is not related to the splenectomy. Six of the eight bronchopulmonary complications and three of the four deaths occurred after extensive thoroabdominal resective procedures where the spleen was part of the intended surgical specimen. Only one of 11 patients with left upper quadrant drains developed subphrenic abscess and this was due to an anastomotic leak. This again supports our impression that special circumstances dictate the use of drains.

The incidence of splenectomy for accidental splenic injury in the course of abdominal operations is variously quoted from 3% to 40%.[1,2,3,6,7] Accidental injury occurs most frequently in the course of upper abdominal operations and is more likely to occur when such operations are of an urgent or emergency nature. Inadequate exposure, lack of adequate skilled assistance and the sense of need for rapid completion of an emergency procedure contribute to the higher incidence of splenic injury when compared to that accompanying elective upper abdominal operations. Five of our 11 patients who had splenectomy for iatrogenic injury, were operated for upper gastrointestinal bleeding under urgent or emergency conditions. Olsen and Beaudoin[3] attributed most accidental splenic injuries to misdirected traction of the stomach or colon during upper abdominal procedures, causing avulsions at the splenic hilum. This would explain the splenic rupture in two of their patients following exploration through the inguinal hernial sac at the time of herniorrhaphy. Placing a pack cephalad to the spleen as advocated by Baker,[1] directing gastric or colonic traction toward the patient's left foot and avoidance of deep retractors in the left upper quadrant have been effective in reducing splenic injuries in our hands.

Table VII Causes of Death

Group	No. Deaths	Cause of Death	
1.	2/22	Systemic Sepsis	2
2.	5/13	Mycardial Infarction	2
		Bronchopulmonary Sepsis	2
		Liver Failure	1
3.	4/11	Pulmonary Edema	1
		Bronchopulmonary Sepsis	2
		Peritonitis	1
4.	0/4		
		Total	11

The contribution of the iatrogenic splenic injury to morbidity or mortality is difficult to assess. Olsen and Beaudoin[3] reported 20 complications and four deaths in a group of 121 splenectomies for iatrogenic injury. Bostrom and Page[6] observed 50% complications and 19% deaths in 16 patients who required splenectomy for accidental injury. Although we could not directly link the complications and death of any of our patients in group III (accidental) to the splenectomy there is little doubt that the additional procedure prolonged the operative time and the surgical stress, contributed to a change in blood coagulation status and indirectly influenced the clinical course in an adverse manner.

Post-splenectomy thrombocytosis is frequently recorded and occasionally accounts for deaths from thromboembolic phenomena.[8] In our patients thrombocytosis reached its maximum between the 5th and 7th postoperative day. One of our patients developed thrombocytosis with platelets in excess of one million and was treated with anticoagulants for three weeks. In nine more patients the platelet levels reached 500,000 to 750,000/cu.mm. and then reverted to normal with no treatment. In contrast to others[8] we believe that anticoagulant treatment should be instituted if platelets exceed one million/cu.mm.

Accessory spleens were found in six patients undergoing splenectomy for hematologic disease and only once in the incidental group. This finding has been commented upon by Olsen and Beaudoin.[9] Recurrence of the original hematologic disorder after splenectomy should alert one to such a possibility.

B. Deaths:

There were 11 deaths in the entire series (22%). When broken down by group, however, it is obvious that the majority of deaths were due to factors not related to splenectomy (**Table VII**).

Both deaths in group I were due to septic processes. In one the septic process was obviously aggravated by immunosuppression. Whether splenectomy as such had a detrimental systemic effect on the patient's defense mechanisms as alluded to by Hodam[2] would be difficult to ascertain. The deaths in group II (incidental) have no relation to the removal of the spleen as indicated in **Table IV**. Of the four deaths in group III (iatrogenic) one was attributed to acute pulmonary edema, confirmed by autopsy on the 4th postoperative day. Two more were directly related to severe bronchopulmonary complications; left pleural effusion with alveolocapillary block following vagotomy and pyloroplasty and sepsis after total gastrectomy for recurrent bleeding gastritis, two weeks following vagotomy and pyloroplasty. This latter patient also had extensive upper abdominal sepsis from duodenal fistula, wound infection with dehiscence and prolonged ileus. He had been successfully resuscitated by open cardiac massage eight years previously, with residual serious cardiopulmonary damage. At autopsy it was noted that the abdominal sepsis had cleared, but bronchopulmonary sepsis and chronic congestive failure persisted and were considered responsible for his demise. The fourth patient developed peritonitis, liver failure with ascites and died 30 days after vagotomy and hemisgastrectomy. No drain had been left in the abdomen. The gastrointestinal anastomosis most likely accounted for the peritoneal sepsis, while the pre-existing cirrhosis and ascites curtailed her chances for recovery.

Summary and Conclusions

Experience with 50 patients who underwent splenectomies for various indications is summarized. Eleven patients (22%) died as a result of the underlying disease or of complications developing from the primary operations. Severe bronchopulmonary cardiac complications accounted for seven deaths, sepsis for three, and liver failure for one. No death could be directly attributed to the splenectomy.

The overall complication rate was 40% with a preponderance of bronchopulmonary complications in 32%. This high incidence of bronchopulmonary complications is attributed to extensive upper abdominal or thoraco-abdominal operations in patients of the older age group and does not seem to be directly related to the splenectomy. There were no complications associated with the use of drains when adjacent organs were left intact.

Preoperative thrombocytopenia of significant degree was not associated with hemorrhagic problems. Postoperative thrombocytosis occurred in 20% of the patients, but remained asymptomatic and was treated with anticoagulants in only one patient.

Most of the splenic injuries in the iatrogenic group occurred in patients undergoing emergency procedures or in those with improper technical exposure. Improvement of these technical factors should be associated with a lower incidence of injury and decrease in the associated morbidity.

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MARMP offers new booklet on four neoplasms

A new 21-page booklet on the diagnosis and management of four neoplasms—malignant lymphoma, including Hodgkin's disease; carcinoma of the cervix, carcinoma of the uterus and carcinoma of the breast—is available to physicians from the Michigan Association of Regional Medical Programs.

The MARMP Professional Advisory Council on Cancer, chaired by Harold Bowman, MD, Grand Rapids, has developed the free booklet, which may be obtained by writing the MARMP Central Office, Suite 200, 1111 Michigan Ave., East Lansing, 48823.

Clinical notes

Hematoma of the nasal septum

By Oliver B. McGillicuddy, MD
Lansing

It is more important to examine the septum of the nose of an injured child or teenager than to X-Ray the nasal bones. X-Rays may not reveal a nasal bone and septal dislocation but should be taken for possible legal action. Palpation of the nasal arch and careful inspection is more apt to reveal deformity.

On careful inspection of the interior of the nose, it is not uncommon to find the septum dislodged from its midline base and it becomes a matter of judgment as to whether or not it can or needs to be corrected.

It becomes an emergency if a hematoma of the septum is discovered. Fortunately, this complication is rare and probably most general practitioners and many pediatricians have never encountered it. Unfortunately, rhinologists often see these cases too late to save the septal cartilage.

The hematoma develops after severe trauma to the nose. The septal cartilage is fractured. A blood vessel in the perichondrium is lacerated and bleeding occurs under the perichondrium.

As the bleeding continues, the perichondrium is lifted off the septal cartilage on both sides.

Cartilage without its perichondrial blood supply softens like "butter on a hot stove."

If diagnosed early, and this means within forty-eight hours, the treatment is simple. The septum is incised, blood is aspirated from the interior of the septum and both nostrils are firmly packed, pressing the perichondrium and mucous membrane against the septal cartilage. The packs are left in place for three or four days.

If diagnosed late, the treatment is the same but the end result is a disaster. The septal cartilage will have become jelly and the septal support to the lower two thirds of the dorsum of the nose will be lost.

The inevitable result will be an ugly saddle deformity of the nose. This saddle deformity can be corrected later, after scar tissue contraction has ceased, by a bone implant under the dorsum skin and a strut of bone in the columella. If the child is young, the implants may have to be replaced when or if the nose has reached its full growth. The nose may remain infantile.

The long period of waiting, often six months or more, before corrective surgery can be started, is a very emotionally traumatic experience for the child.

The patient with a hematoma of the septum complains of increasing nasal obstruction and headache. The parents, sometimes unaware of the injury, think the child has a severe cold or has developed a nasal allergy. There is no epistaxis. Home and drug store remedies are frequently administered. When the child finally sees a doctor it is apt to be too late to save the septal cartilage.

On examination of the interior of the nose, the doctor, if he as aware of the possibility of a hematoma, may see both nostrils blocked by a red swelling. If late, the swollen tissue will actually protrude from the anterior nares. If early, he will note a thickening of part or all of the septum.

The most common mistake is to diagnose this swollen tissue as nasal polyps or a severe allergic swelling or to temporize and think it a swelling due to the injury and to wait for it to subside.

This complication may occur in adults but is much more common in children.

On discovery, a dislocated septum can often be corrected without too much deformity even a week after injury. The neglected hematoma of the septum is a childhood tragedy.

Doctor McGillicuddy is a Lansing otolaryngologist and is past chairman of the MSMS Council and past MSMS president.

U-M research of early abortions supported by new grant

Two research projects aimed at developing drugs to produce early abortions either by pill or injection are included in a new $1,089,428 federal grant to The University of Michigan Center for Population Planning. The Center is a unit of the School of Public Health.

One study will involve implanting a transducer into the uterus of 15 female volunteers. The other will seek an antibody which will cause rejection of the early fetus allowing repeated abortions with minimal effect on the patient.

The two projects are among seven scientific investigations to be funded for three years for $572,036 by the U.S. Agency for International Development (AID). They are directed by Samuel J. Behrman, MD, professof of obstetrics and gynecology.

Are congenital virus infections possible in successive pregnancies?

By Thad H. Joos, MD
Detroit

That maternal infection with a viral agent during early pregnancy, can lead to multiple congenital defects in the offspring has been well documented.[1,2,3,4] This report is presented not to enlarge an already adequate fund of information, but to pose the following question. Can the products of two successive pregnancies be victims of congenital virus infections?

Case Reports: Mr. and Mrs. M. were both normal Caucasians of the ordinary child-producing age. There was a paternal great grandfather who at age of 80, developed cataracts and Mrs. M. had infectious hepatitis in 1960 with complete recovery.

Mrs. M's first pregnancy ended in a miscarriage at six weeks in 1961. The cause was unknown. The second pregnancy produced a full-term, normal female on February 3, 1963.

Pregnancy number three began in December, 1964. A respiratory infection occurred during the first six weeks and was treated with aspirin and an antihistamine preparation. At two months some minor vaginal bleeding occurred, which promptly stopped. Vitamins and iron were taken during the pregnancy.

A. M. was born at term on August 29, 1965. The weight was 3750 grams. At three weeks of age, bilateral cataracts along with icterus were noted. A urinary test for galactose was negative. The icterus gradually faded.

On examination by the author on November 15, 1965, the cataracts were observed, but in addition, a cardiac murmur was heard and the frontal bossae were prominent. Head circumference was 42.3 cm. Neither the spleen nor liver were palpable.

The cataract OD was removed on December 10, 1965 and on December 19, 1965 the child was admitted to the Children's Hospital of Michigan for further evaluation. Pertinent findings were: (1) small IV septal defect; (2) very large bilateral porencephalic cysts; (3) rubella antibody titers using the indirect fluorescent antibody technique[5] were positive in the mother between 1:64 and 1:128, and in the baby positive 1:4. The baby's titer most likely would have been higher had not the serum become contaminated with mold; (4) cultures from the nasopharynx of both baby and mother grown on rabbit cornea cells were negative for rubella virus.[6] The child's head size continued to rapidly increase and her motor development lagged. She was placed in custodial care at 10 months of age.

The fourth pregnancy began in November of 1966, or about 15 months after the birth of A. M. Vaginal bleeding occurred at 2 and 3½ months. The latter being controlled by one month of bed rest. No respiratory infections were present, and as in previous pregnancies, vitamins and iron were taken, J.M. was born near term on August 16, 1967, weighing 2500 grams. The placenta was normal. The neonatal course was normal except for slight icterus. No hepto or splenomegally was present. At two months of age a cataract was found OD and at three months OS. Their descriptions were: "advanced lens opacities in the right, the left eyes, a central white opacity surrounded by small granular opacities."[7] To date, no other anatomic abnomalies have been found. Urine for galactose was negative as were two nasopharangeal cultures from the mother and baby for rubella virus. These were obtained in December, 1967, and February, 1968. Rubella antibody titers done in December of 1967 on the mother's serum showed a positive titer as in 1965. Those done on the baby's serum were equivocal for the presence of rubella antibody.

Cataract removal was performed in November, 1967, and the report is as follows. "Suction extraction was done on the right. The iris pigment tended to adhere to the anterior capsule indicating separation of posterior synechia. Again the lens material, as with the sibling two years ago, was quite tenacious. A central plaque was present, which was dislodged nasally. The presence of the adhesions between the iris and lens suggest an inflammatory etiology such as the rubella virus."[8] A contact lens was employed in the operated eye and some vision has been maintained. Her growth and development have been normal considering the visual handicap.

In November of 1967 the fifth pregnancy began, and ended fortunately with the delivering of a normal female infant weighing 3600 grams. As of December 1, 1968, no abnormalities have been found in this child.

The placenta was normal, nasopharangeal cultures for rubella virus were negative from mother

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Doctor Joos is an adjunct instructor in pediatrics at Wayne State University College of Medicine.

and baby. Quantitative immunoglobulins on cord blood showed IGG 1000 mgm%, IGM trace, IGA absent. Rubella antibodies were absent in the same blood specimen. Lack of facilities precluded some of these studies on the earlier babies.

Discussion: Coffey and Jessop[9] in a hospital survey reported that an influenza-like upper respiratory infection was obtained five times as often from mothers of abnormal babies (18.4 per cent) as from controls (3.6 per cent). In an excellent review article by Wright,[1] however, it is stated that while a number of maternal viral diseases have been etiologically incriminated in congenital defects only two, rubella and cytomegalovirus, have definitely been proven to be associated with defects. All babies in the series of Weller and Hanshaw[10] with cytomegalic inclusion disease had heptosplenomegally. Jaundice and neurological sequelae were frequent, but not ocular lesions.

Even with the absence of clinical rubella in Mrs. M. during her third pregnancy, the offspring fits the rubella syndrome, with eye, heart, and nervous system abnormalities. Conception occurred in 1964, a rubella epidemic year. Karmody,[11] Butler, et al,[12] Schiff, et al,[13] and Weller, et al,[14] report that frequently a clinical case of rubella is diagnosed only in retrospect after finding the stigmata in the child and rubella antibodies in the sera of the mother and child.

The antihistamine chlorcyclizine has been reported to cause major anomalies in the fetus,[15] but there was no use of this particular antihistamine by Mrs. M. in either pregnancy.

The case for rubella-caused cataracts is indeed less impressive for the fourth child, J. M., with only a questionable antibody titer in the serum and negative cultures from the nasopharynx. Clinically and pathologically the cataract fits into the type seen with congenital rubella. Gregg[16] describes the rubella cataract as follows . . . "In the undilated condition of the pupil the opacities filled the entire area. After dilation, the opacities appeared densely white—sometimes quite pearly in the central area with a small, apparently clear zone between this and the pupillary border of the iris." Zimmerman[17] further supports the above by stating that histologically, "The most marked alterations are always observed centrally, accounting for the dense nuclear cataract observed clinically."

Hereditary cataracts are pathologically different and, typically occur as a dominant trait or recessive factor, but sex linked inheritance has been reported.[18] It seems, therefore, that more than one remote member of the family would have had cataracts had heredity been involved.

One would like to believe that two such deformed babies were chance happenings and not etiologically related. Circumstantial evidence, however, makes the physician observer wonder if such were the case.

Summary: The problem of viral infections ante natal in the mother is briefly discussed. A family is presented that may well represent such infections in two successive pregnancies.

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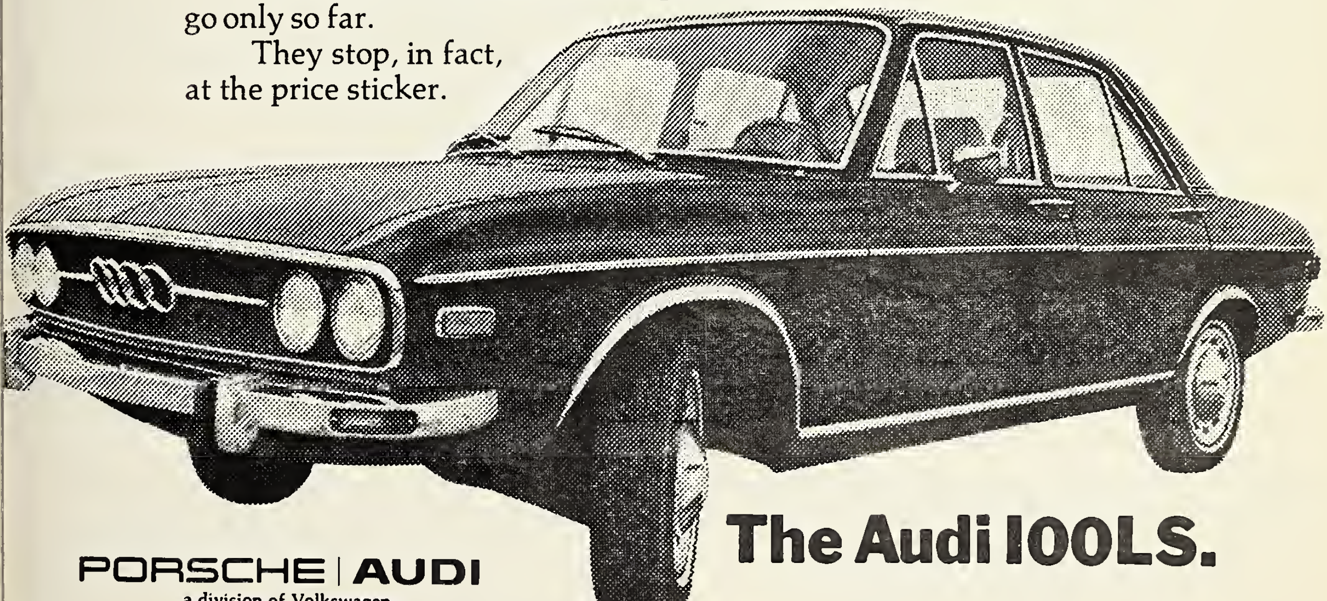

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MSMS in action

Better obstetrical services to Michigan's residents goal of MSMS committee

An MSMS subcommittee is now beginning work on its plan to involve county medical societies, local hospitals and planning groups in effective planning for obstetric and newborn services at the community level.

Through its efforts in 1972, the MSMS Subcommittee on Better Utilization of Obstetrical Beds hopes to eliminate and/or consolidate poorly-utilized obstetrical services, obtain needed obstetrical beds and services, plan regional centers for the care of high risk mothers and infants where such care is not now available.

The subcommittee, a wing of the MSMS Maternal and Perinatal Health Committee, won approval of its plans and some financial support from The MSMS Council at The Council's November meeting.

"We are convinced that it is exceedingly important for a professional nongovernmental organization to provide the initiative and leadership in this effort," says Richard T. Mellis, MD, Kalamazoo, chairman of the maternal and perinatal health committee.

Seven subcommittee meetings are planned, three at MSMS headquarters and four in communities around the state to be devoted to actual involvement in local planning efforts.

The committee includes representatives of the Department of Public Health, the Michigan Hospital Association and the Michigan Association of Osteopathic Physicians and Surgeons.

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Here is definitive summary of current status of Michigan Medicaid program

The Medicare and Medicaid programs were passed by Congress as joint additions to the Social Security Act in 1965. By adding two new titles to this basic legislation, Title 18 (Medicare) and Title 19 (Medicaid), the Congress authorized a mechanism to finance certain health services for the elderly through the Social Security Administration on the one hand, and provided Federal matching money to states which wished to provide health care to its "categorically needy" or "medically indigent" on the other. Michigan's decision to participate in the Medicaid program was expressed in Public Act 321 of 1966.

Implementation of the Michigan program began on Oct. 1, 1966. Since funds were not available to cover the estimated cost of full services for the full year, the Legislature provided that services should be initiated on a phased-in basis as follows:

Oct. 1, 1966
1. Inpatient and outpatient hospital services.
2. Nursing home services and care in approved county medical care facilities.
3. Physician's services in the hospital.
4. Home nursing services.

This article is for Michigan physicians who would like to know more about the Michigan Medical Assistance Program (Medicaid) and:

(1) The basis for the state's decision to assume fiscal agent duties for Medicaid and the implications of this decision for physicians;

(2) problems associated with the "eligibility process";

(3) the lack of formalized publicized Medicaid policies and procedures;

(4) peer review and the Michigan State Medical Society, and

(5) the present methodology used to determine physician reimbursement.

The information comes from the text of a talk made at the recent joint meeting of the MSMS committees on governmental medical care programs and legal affairs. The speaker was Stuart Paterson, deputy director, Medical and Management Information Systems, Michigan Department of Social Services whose insight and observations so impressed the committee members that they wished to have all MSMS members share in the information.

Jan. 1, 1967
1. Physician's services in his office, client's home, or elsewhere.
2. Prescribed drugs.

April 1, 1967
1. Dental services.
2. Eyeglasses and other prosthetic devices.
3. Ambulance and other services.

By Jan. 1, however, it was already clear that fiscal requirements had been seriously underestimated and Governor Romney therefore ordered that the provision of physician office services and prescribed drugs be suspended for the "medically needy" and that dental and eyeglasses services be suspended for all recipients. As we all know, the basic structure of benefits provided under Medicaid has remained constant since that time.

It is worth noting that Michigan was not alone in its plight. Many other states were caught in a cost bind as well, and the Federal Government relying on an estimate of $800 million in Federal funds was probably the most surprised of all when the first *eight* states to initiate Medicaid submitted combined cost estimates equal to that amount. To be sure, some suspected something to this effect when the legislation was passed, but it appears that no one fully appreciated the monetary implication of Title 19.

I trust the obvious attention to Medicaid's fiscal impact does not suggest that I do not appreciate its other effects as well—on the provider, the recipient and the health facility. But I do think the most graphic illustration of what we have been faced with lies in a brief look at dollars expended. In its initial year, the Medicaid budget for Michigan was $81.3 million. By Fiscal 1969 it had grown to $188.7 million; last year $270.0 million was spent; and our 71-72 budget bill now stands at $326.0 million. This represents an increase of 400% in five years.

Seldom, if ever, has so large an undertaking been implemented in so short a time.

By the fall of 1968, the implications of this fact were clear to the Department of Social Services, the Executive Office and the Legislature. Some overt action was required to recapture control of Medicaid. Two critical problems, largely attributable to the fact that early implementation has precluded a thorough pre-planning, were crippling our ability to deal effectively with the program.

The first was a lack of information. For example, the average number and cost of prescriptions obtained by recipients per month would have permitted a better estimate of funds necessary to support the provision of drugs. As it is, the Department has found it necessary to request supplemental appropriations for this purpose.

The second general problem was a lack of management control. An example of this is that no mechanism exists to ensure that the recipient information supplied Blue Cross and Blue Shield by the State is completely accurate or that they properly update their eligibility files.

Consequently, the Department requested, the Governor recommended and the Legislature appropriated funds for a Title XIX Systems Development Project in the Social Services 1969-70 budget. The project was to "develop a system for the administration of the Medicaid program, to create effective utilization and fiscal controls and supporting systems including claims processing, financial audit, medical surveillance, information reports, program planning and evaluation and the selection of a fiscal agent or agents."

Shortly after passage of the bill, a request for proposals to aid the Department in defining the requirements of Medicaid was sent to major consulting firms. A contract was signed with Touche Ross & Co. in November, 1969. The result of this effort was the "Michigan Medicaid Systems Design Requirements" published in April, 1970. It represents the basis for what we now call the "new system."

In June another request for proposal was issued for aid in the implementation of the requirements. Touche Ross & Co. was again the successful bidder and in August a contract was signed with them for assistance in implementing four of the eight Medicaid subsystems: recipient eligibility; provider enrollment; invoice processing; and performance, surveillance and utilization review. The remaining four: government reporting; cost settlement and auditing; Medicare premium processing; and in-

The speaker, Stuart Paterson, center, is introduced by Kenneth H. Johnson, MD, left, chairman of the MSMS Legal Affairs Committee. At right is Robert E. Rice, MD, Greenville, chairman of the MSMS Committee on Governmental Medical Care Programs. The two committees met jointly to hear Mr. Paterson.

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"At no time was the ability or integrity of either individuals of Blue Cross and Blue Shield or the organizations as a whole, questioned in any way" (in the decision for state take-over of Medicaid).

STATUS OF MEDICAID/Continued

quiry and advisory services would be carried out by the State.

Two other items of major importance were likewise to be our sole responsibility—organization planning and fiscal agent selection.

* * *

This then brings us to the first item of attention, the selection of a fiscal intermediary for the new system. The design requirements spelled out, in detail, those functions to be carried out by a fiscal agent. In order to ensure that these duties would be performed for the least cost consistent with a high standard of performance, it was decided to permit all interested parties to bid on the work. A letter requesting an indication of interest and qualifications was sent to eighteen outside organizations on October 1, 1970. Positive indication was received from seven. On December 15, 1970, a request for proposal was issued and on February 1, 1971, responses were received from four: Blue Cross, Blue Shield, Nationwide and Prudential. The state had also determined the cost and feasibility of becoming its own fiscal agent during this time.

A fiscal agent review committee composed of two Senators, two Representatives and two members of the Executive Office was established to review all proposals. In May, after extensive analysis, it was decided that further discussion and negotiation should be carried out with Blue Cross and Blue Shield. This occurred during June and July. By early August revised proposals had been submitted and examined.

A meeting of the review committee was then convened at which time it was determined that the fiscal agent functions of the new Medicaid system should be administered by the state itself.

It is my observation that the bases for this decision were two. First, the proposals of the Blues represented an annual cost of some $1.0 million over that of the state. Second, the decision was consistent with sound management principles: The integration of similar responsibilities into one organization thus reducing communications problems; The elimination of duplication of effort.

I think it important to emphasize that at no time was the ability or integrity of either individuals of Blue Cross and Blue Shield, or the organizations as a whole, questioned in any way.

Let me take just a minute to outline the major components of the cost differential. Quite understandably there has been some questioning of government's ability to do anything for less money than those outside.

I'm sure you know that the Department must create and maintain a computer file of eligible recipients. In order for anyone else to process claims, they must have a copy of this file and annual cost of this duplication approaches $150,000. Other areas of major cost differentials were in provider enrollment and invoice processing. The reasons for differences here are not so clear, but they amount to some $550,000 annually.

Turning to the specifics of the transfer, we expect to begin on April 1, 1972, and complete the process by the following April. The exact schedule is now a matter of discussion, but will be announced as soon as possible. Generally, we will make the transition on a provider type by provider type basis.

Let me now turn to four features which we are confident will be welcomed by providers:

1. Any claims which are not subject to special review, such as individual consideration, will be processed and paid within 30 days;
2. A remittance advice will accompany each payment. It will detail all claims received and note their status. Where payment is other than billed, an explanation will be provided;
3. Providers will be able to place their own identification or file numbers on the invoice and receive them back on payments to ease bookkeeping; and,
4. A mechanism for positive determination of eligibility will be available.

* * *

We have just identified the second major item of concern—recipient eligibility.

As most of you are painfully aware, this represents the greatest single obstacle to the efficient operation of Medicaid. Why? Most simply put, because eligibility information is not always accurate nor is it always timely. Without boring you with details, suffice it to say that it takes from 9 - 13 weeks to move information from the county to the state to the Blues. Hence the inordinate non-eligible rejection rate.

The solution of this problem is underway and represents one of the most massive management efforts ever undertaken by the Department of Social Services. When fully implemented the Client Information System will:

1. Ensure that eligibility files are accurate and timely.
2. Issue M.A. identification cards only after the file to be used in invoice processing is properly updated.
3. Provide state-wide information to all authorized inquirers.
4. Maintain positive control over all data contained within the system.
5. Control the processing of applications for assistance and services.
6. Provide reports which will assist the Department in case load management at the county office.

This will all be accomplished through the use of an "on-line" telecommunications network. In layman's language this means that changes will be made directly into the computer rather than by mailing paper to the state office where it is manually put into batches, keypunched, verified and then entered into the computer. This latter process now accounts for a good portion of the 9 - 13 weeks mentioned earlier.

Because of the scope and complexity of the Client Information System, it is being implemented in phases. Complete state-wide operation is scheduled for the first quarter of 1973. At this time, we do have the capability to inquire against the files—which are still updated by paper. In early 1972 the first county will begin "on-line" update. Others will follow as rapidly as possible and following "on-line" update, "on-line" registration will occur.

The important thing to you, however, is that as more and more counties go "on-line" the state's files will become more timely and more accurate. When fully operational, virtually instantaneous file changes will occur whenever counties determine an action is indicated.

M.A. identification cards will be issued the evening of the day in which the file is changed and since this file will also serve as recipient eligibility verification for invoice processing, accuracy is assured in that function as well.

At some time in the future, we fully intend to make this telecommunications network available to providers. I assure you that we will keep the Society advised of our progress in this area.

Next, I would like to touch on what we are doing to close what we recognize to be our communications gap. It certainly is no secret that a clearly written, easily used provider manual for the Michigan Medicaid Program does not exist today. One of the primary responsibilities of a newly created Provider and Recipient Services unit will be the

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development and maintenance of such a document. It will contain information on recipient eligibility, provider enrollment, how to prepare invoices, etc., and will be geared to the specific needs and concerns of the various provider types. Obviously, these must be available prior to the transfer of fiscal agent duties to the state. Since this transfer will occur on a provider by provider basis, however, a proper sequencing will permit us to meet this obligation.

We also are planning "billing seminars" which will be held around the state to ensure that the people who prepare claims for you fully understand what is expected of them.

In short, we recognize that we must give this area explicit attention and are taking steps to do so.

* * *

The next subject is no less complex than at least two already discussed.

When Representative Raymond Kehres mailed a questionnaire to Michigan's physicians last May some 39% of those responding indicated that they didn't understand the current method of reimbursement for services rendered under Medicaid. I can't say I blame them. Most briefly put, Medicaid, like Blue Shield itself, pays the lesser of: 1. the charge; 2. the physician's usual and customary fee for that procedure; or 3. the prevailing rate for that procedure in his area. That is the mechanism. I am quick to recognize one other factor of major importance.

Pursuant to H.E.W. Policy Regulation 40-4, effective July 1, 1969, reimbursement for physicians is frozen at amounts paid as of January 1, 1969. While Medicare has since relaxed this somewhat, the Medicaid program has not. We are cognizant of the inequities inherent in this policy—the relative freedom of the brand new physician to set his usual and customary rate as he enters practice, while those in practice in 1969 are held to their then usual and customary amounts. Our concerns have been made known to Washington, but to date we have no indication that this regulation is to be modified or removed.

In this regard it is important to note another portion of 40-4 which can be summarized as follows:

Any change in reimbursement methodology cannot be made in a way which circumvents the essence of the 1969 freeze.

All this is by way of saying that if it is determined to use a relative value schedule in Medicaid, the conversion amount would have have to be in conformity with current regulation. I might add here, that at the request of the Michigan State Medical Society we will use the Current Procedural Terminology designations and have provided capability to carry the appended relative value into the payment system. Whether or not a relative value schedule is to be adopted is a matter under current examination and notes the passage of Resolution 6 at your last meeting of the House of Delegates. We have also recently obtained a copy of the Society's research bulletin which reports "Trends in Overhead Costs of Medical Practice." It suggests that costs as a percent of revenues do not vary significantly across the state.

We anticipate arriving at a decision on physician reimbursement methodology prior to the implementation of the new invoice processing system for physicians. Since this will occur no earlier than next fall, sufficient lead time still exists to permit a thorough review of alternatives. Dr. Leland Hall, Deputy Director for Research and Program Analysis, whom I think is familiar to some of you, will provide needed expertise in this analysis.

The fifth and final topic is that of peer review.

Ever increasing public attention is being focused on the "high cost of health care" and one of the mechanisms held forth as a means to lessen the increase is peer review. You are all familiar with utilization review committees, for example. In recent years, some state medical societies have created medical foundations to provide a means for peer review in its broadest sense. I understand that a similar move is contemplated here. We welcome such a development.

Until such time as this occurs, however, we are working directly with the Society in the development of a peer review process for Medicaid. A committee of four physicians has been appointed by The Council to work with the Department of Public Health with which we have a contract to carry out this function. We are most pleased and encouraged by its progress.

Let me emphasize our firm belief that only through the help and cooperation of physicians can any measure of real improvement be achieved in the delivery of health services to Michigan's citizens.

As I have indicated, we are making a major effort to improve the administration and operation of Medicaid. Until this is accomplished, primary attention is necessarily given to the many day-to-day crises brought on by the inability of a quickly developed system to deal with a massive program.

We have high hopes that this stage of development will soon be behind us and that we can together move on to address ourselves to the more significant problems in health care.

"We are making a major effort to improve the administration and operation of Medicaid."

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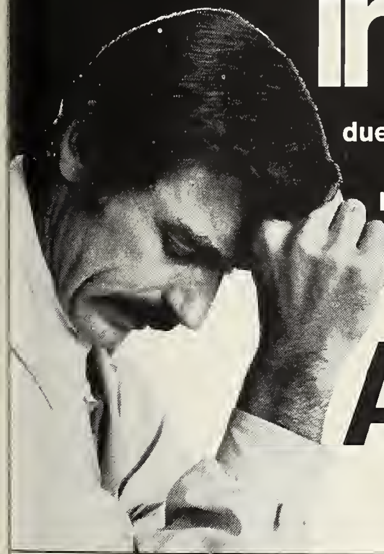

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New Feature: County Spotlight

Kent County leads the nation in emergency care

By Jeanne Smith
Assistant
MSMS Communications

Early this year, one of the potentially most effective emergency medical care programs in the country will be operative in the Grand Rapids area as the latest achievement of the Kent County Medical Society's emergency services committee.

The dedicated physicians who have worked in this program since it began seven years ago with first aid classes for policemen and firemen talk about the program in terms of the accident victims it has aided, the acutely ill individuals it has helped.

But the public relations value of the program, which recently caused the *Grand Rapids Press* to comment editorially, "There are few communities that can boast anything similar to it," cannot be overlooked.

The latest achievement in the Kent County program involves installation of a separate radio system linking police emergency vehicles and private ambulances to emergency rooms of Grand Rapids hospitals and special training of police and ambulance attendants in electrocardiography, the same training given nurses working in intensive care units in hospitals.

(See related editorial, page 76)

With equipment already installed in emergency vehicles and ambulances, emergency personnel will be able to relay electrocardiograms to be printed out in emergency rooms.

The specially trained police and ambulance attendants will be permitted to proceed with defibrillation and other emergency treatment for patients under direct instructions from physicians given by radio from emergency rooms.

Financing of the $40,000 program has been arranged by the Kent County Medical Society under a grant from the federal government, with the aid of matching local funds obtained by the society.

It is the first such program in Michigan and is believed to be one of only two now being undertaken in the United States.

The new aid for heart patients becomes the latest step in the program that began under impetus from C. Mark Vasu, MD, chairman of the Kent County emergency services committee. Starting with first aid courses, the next step was the establishment of the "Crash Squad" of volunteer physicians who devote weekends to duty with police emergency vehicles, not only providing medical care but also giving in-service training to police personnel.

EMERGENCY UNIT

(Photo courtesy of *Grand Rapids Press*)

C. Mark Vasu, MD, chairman of the Kent County Medical Society emergency services committee, explains use of defibrillator to Grand Rapids policement.

Doctor Vasu, along with other key members of his committee, Lee R. Pool, MD, John R. Wilson, MD, and Fred A. Doornbos, MD, have police radios in their cars and frequently respond to off-time emergency calls as well as taking their regular turns of duty on the list of 20 MD "Crash Squad" volunteers.

Specialized training for police assigned to the emergency vehicles has produced skilled personnel devoted to their work. Special arm patches have been provided for them by the county medical society.

"We have seen this develop as an important community relations program for police," said Doctor Pool. "The E Units have become well known and, particularly in the inner city, help alleviate fear of police."

As of January 1, only police who have completed specialized training are assigned to emergency units, eliminating the one-time system of rotating emergency vehicle service for police as for other types of duty.

Grand Rapids firemen regularly complete courses in cardiopulmonary resuscitation in a KCMS-Michigan Heart Association program.

According to Doctor Vasu, Grand Rapids' ambulance ordinance, adopted in 1968 with the urging f the county medical society, has been vital in imlementing the work of the emergency services ommittee.

He called the Grand Rapids code "the strongest mbulance ordinance of its type in the United tates," adding, "It is strong because it requires vo men in an ambulance instead of one man as is pecified in the state ordinance and it provides additional training which can be matched no where lse."

Each of the physicians involved in the Kent ounty program has his own special reasons for is interest, but Doctor Vasu summarized the genral motivation for participation:

"The Grand Rapids and Kent County area has ttracted attention nationwide to some of the more nique aspects of our program. When we carefully nalyze these aspects, we find that it boils down one simple fact, that the physician has willingly nd graciously allowed himself to be involved in ommunity affairs."

lints for county societies onsidering this idea:

Intense interest and activity by members of the Kent County Medical Society's emergency services committee, along with the backing and cooperation of the entire society, have contributed to the success of the seven-year-old emergency care program in Grand Rapids.

In addition to providing an important community service, the program has had strong public relations value for physicians as well as for police in Grand Rapids.

According to the committee, the medical community must take the lead in establishing such a program. Here are some of the ingredients:

1. A group of physicians who are motivated to see improvements in the emergency care given accident victims.

2. Rapport and cooperation with police and fire departments.

3. A strong ambulance ordinance, as written into law in Grand Rapids, insuring that the patient is getting attention from qualified personnel. Kent County physicians note that pressure from the medical profession is important in achieving effective ordinances covering operation of ambulances.

4. A group such as the KCMS emergency services committee to explore and propose programs.

5. Backing of the local medical society in seeking cooperation of involved community agencies, seeking outside financing if necessary and implementing programs.

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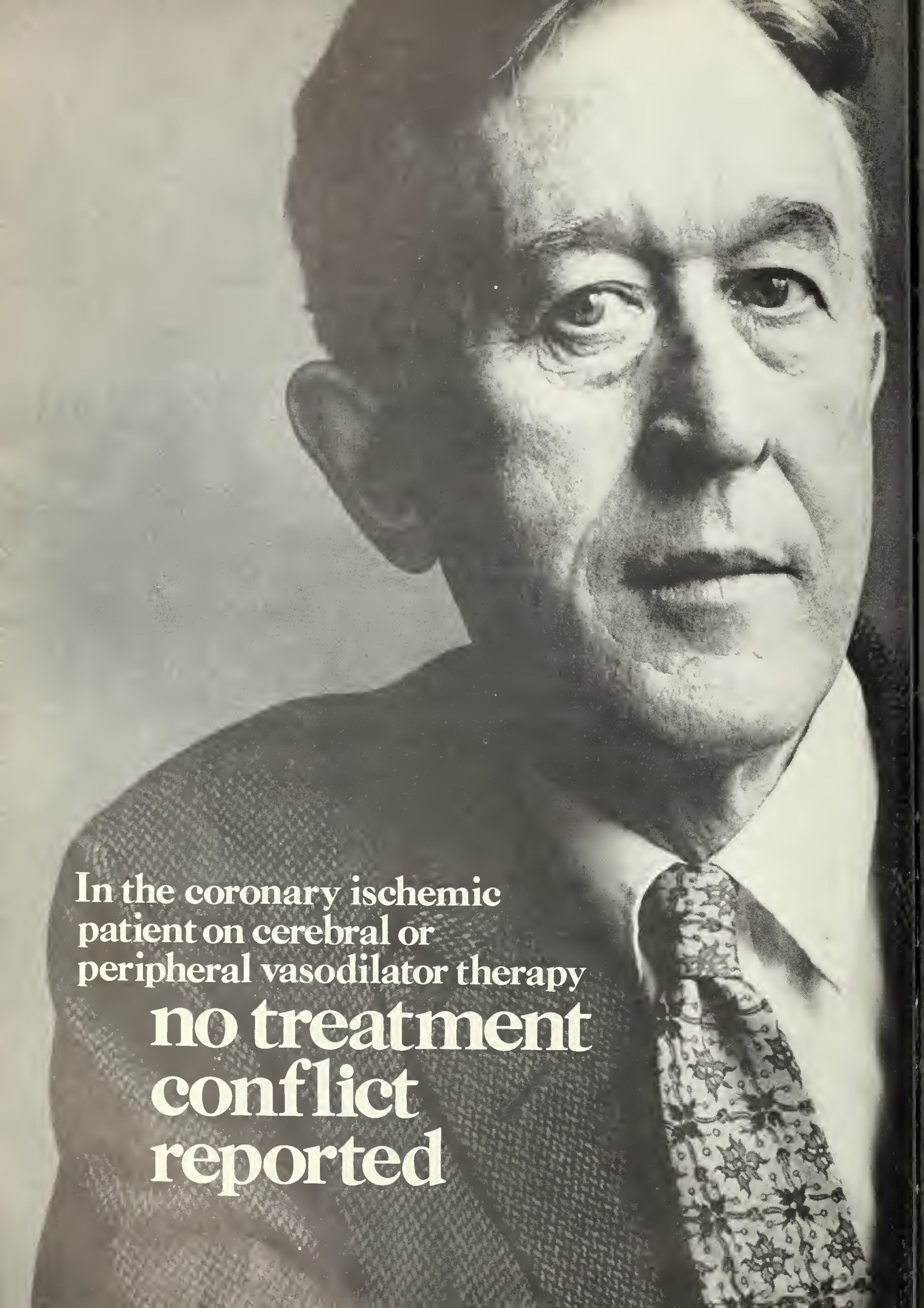
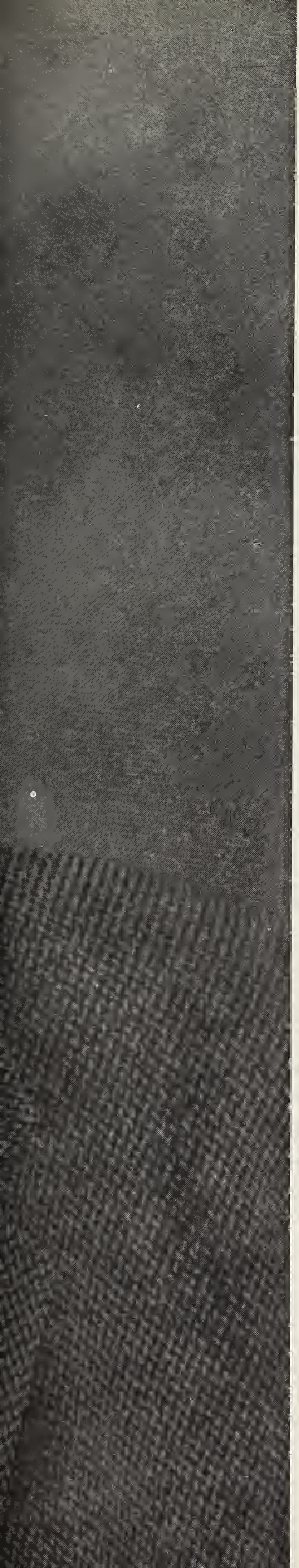

In the coronary ischemic
patient on cerebral or
peripheral vasodilator therapy
no treatment
conflict
reported



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(ISOXSUPRINE HCl)

the compatible vasodilator

- may be used in your patients with coronary insufficiency.
- conflicts have not been reported with diuretics, corticosteroids, antihypertensives or miotics.
- complications in the treatment of diabetes, hypertension, peptic ulcer, glaucoma or liver disease have not been reported.

In fact, there are no known contraindications in recommended oral doses other than it should not be given in the presence of frank arterial bleeding or immediately postpartum.

Although not all clinicians agree on the value of vasodilators in vascular disease, several investigators[1-4] have reported favorably on the effects of isoxsuprine. Effects have been demonstrated both by objective measurement[2,4] and observation of clinical improvement.[1,3] Indications: Cerebrovascular insufficiency, arteriosclerosis obliterans, diabetic vascular diseases, thromboangiitis obliterans (Buerger's disease), Raynaud's disease, postphlebitic conditions, acroparesthesia, frostbite syndrome and ulcers of the extremities (arteriosclerotic, diabetic, thrombotic). Composition: VASODĪLAN tablets, isoxsuprine HCl 10 mg. and 20 mg. Dosage: Oral—10 to 20 mg. t.i.d. or q.i.d. Contraindications and Cautions: There are no known contraindications to recommended oral dosage. Do not give immediately postpartum or in the presence of arterial bleeding. Side Effects: Occasional palpitation and dizziness can usually be controlled by dosage reduction. Complete details available in product brochure from Mead Johnson Laboratories. References: (1) Clarkson, I. S., and LePere, D. M.: Angiology *11*:190-192 (June) 1960. (2) Horton, G. E., and Johnson, P. C., Jr.: Angiology *15*:70-74 (Feb.) 1964. (3) Dhrymiotis, A. D., and Whittier, J. R.: Curr. Ther. Res: *4*:124-128 (April) 1962. (4) Whittier, J. R.: Angiology *15*:82-87 (Feb.) 1964.

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Michigan mediscene

Jan. 5—Council of Medical Specialty Societies, 2 p.m., MSMS Headquarters, contact: Glenn E. Moore, MD, 323 W. Second St., Flint, 48503

Jan. 7-9—Michigan Allergy Society Family Winter Weekend, Shanty Creek Lodge, contact: Rudolph E. Wilhelm, MD, Michigan Allergy Society, 751 S. Military Rd., Dearborn, 48124

Jan. 19—Conference on Changing Patterns of Care for Children and Youth, Michigan Nurses Association, 9:30 a.m., MNA Headquarters, contact: Mrs. Susan Gerds, conference secretary, MNA, 120 Spartan Ave., East Lansing, 48823

Jan. 21—Michigan Association for Regional Medical Programs, board meeting, 2 p.m., MSMS Headquarters, contact: Miss Gaetane LaRocque, acting coordinator, MARMP, 1111 Michigan, East Lansing, 48823

Jan. 24-28—Family Practice Review with the Michigan Academy of Family Physicians, Towsley Center, University Medical Center, Ann Arbor, contact: Neal A. Vanselow, MD, acting chairman, Department of Postgraduate Medicine, Towsley Center, Ann Arbor, 48104

Jan. 25—Woman's Auxiliary to MSMS, executive committee meeting, MSMS Headquarters, contact: Mrs. Charles Schoff, 5209 Sunset Drive, Midland, 48640

Jan. 29-30—Educational seminar and board meeting, Michigan State Medical Assistants Society, Holiday Inn, Battle Creek, contact: Patricia Voke, 196 S. Woodrow Ave., Battle Creek 49015

Feb. 9—Michigan Committee on Trauma, American College of Surgeons, 6:30 p.m., MSMS Headquarters, contact: Thomas C. Blair, MD, 1322 E. Michigan Ave., Lansing, 48912

March 20-21—Spring Session, MSMS House of Delegates, Detroit Hilton Hotel, contact: Richard Campau, MSMS Headquarters

March 26—Board meeting, Michigan State Medical Assistants Society, 11 a.m., MSMS Headquarters, contact: Mrs. Betty L. Boers, president, MSMAS, 1116 Sheridan, Kalamazoo, 49001

March 29—Muskegon Trauma Day, Holiday Inn, Muskegon, contact: Guida Anessa, MD, 205 Medical Center, Muskegon

March 29-30—Annual Michigan Conference on Maternal and Perinatal Health, Olds Plaza Hotel, Lansing, contact: Joseph L. Sheets, MD, 2909 E. Grand River, Lansing, or Helen Schulte, MSMS Headquarters

April 3—Annual Beaumont Lecture—Wayne County Medical Society, Detroit, contact: William Blodgett, MD, Wayne County Medical Society, 1010 Antietam, Detroit, 48207

April 13-15—Michigan Heart Association Heart Days, Cobo Hall, Detroit, contact: Harold Arnow, publicity director, MHA, 13100 Puritan, Detroit, 48227

April 19—Woman's Auxiliary to MSMS, Legislative Day, Olds Plaza, Lansing, contact: Mrs. R. J. Westerhoff, WAMSMS legislative chairman, 2458 Maplewood, SE, Grand Rapids, 49506

April 19-20—Woman's Auxiliary to MSMS, spring conference, Hospitality Inn, Lansing, contact: Mrs. Charles Schoff, 5209 Sunset Drive, Midland, 48640

April 27-30—Annual Convention, Michigan State Medical Assistants Society, Holiday Inn, Crosstown Parkway, Kalamazoo, contact: Mrs. Betty Boers, 1116 Sheridan, Kalamazoo, 49001

April 30-May 5—American Nurses Association Biennial Convention, Cobo Hall, Detroit, contact: Miss Virginia Stone, executive director, Detroit District, Michigan Nurses Association, 316 Fisher Building, Detroit, 48202

May 18-19—Annual Gull Lake meeting, MSMS Committee on Maternal and Perinatal Health, Kellogg Biological Station, Gull Lake, contact: Helen Schulte, MSMS Headquarters

May 22-23—Michigan chapter meeting and scientific session of the American College of Emergency Physicians, Shanty Creek, Bellaire, contact: Gaius Clark, MD, 865 Pebblebrook Lane, East Lansing, 48823

June 2-3—Gaylord Trauma Day, Hidden Valley Otsego Ski Club, Gaylord, contact: Benjamin Henig, MD, Keyport Clinic, 308 Michigan Ave., Grayling, 49738

June 5-7—Initial Management of the Acutely Ill and Injured Patient, Ann Arbor, contact: Charles F. Frey, MD, Department of Surgery, University of Michigan Medical Center, Ann Arbor, 48104

MSMS bureau has new member file

The MSMS Bureau of Economic Information has developed, with the help of the AMA, a new computer system that will have vital information on each member physician. The system will be updated on a yearly basis, through the use of the AMA's master files, and will facilitate specific mailings.

Some of the information maintained on each member will be his year and place of graduation, his specialty and his board achievements. Qualified associations may obtain such information from the Bureau.

For further information, contact John H. Anthony, chief of the bureau, at MSMS headquarters.

What better forum for your ideas is there than *Michigan Medicine*, which monthly reaches over 8,000 physicians? Instead of letting your flashes of insight, gripes and full-blown theories end with the hospital staff meeting or colleagues gathered over coffee, develop them, put them on paper and mail them to *Michigan Medicine*.

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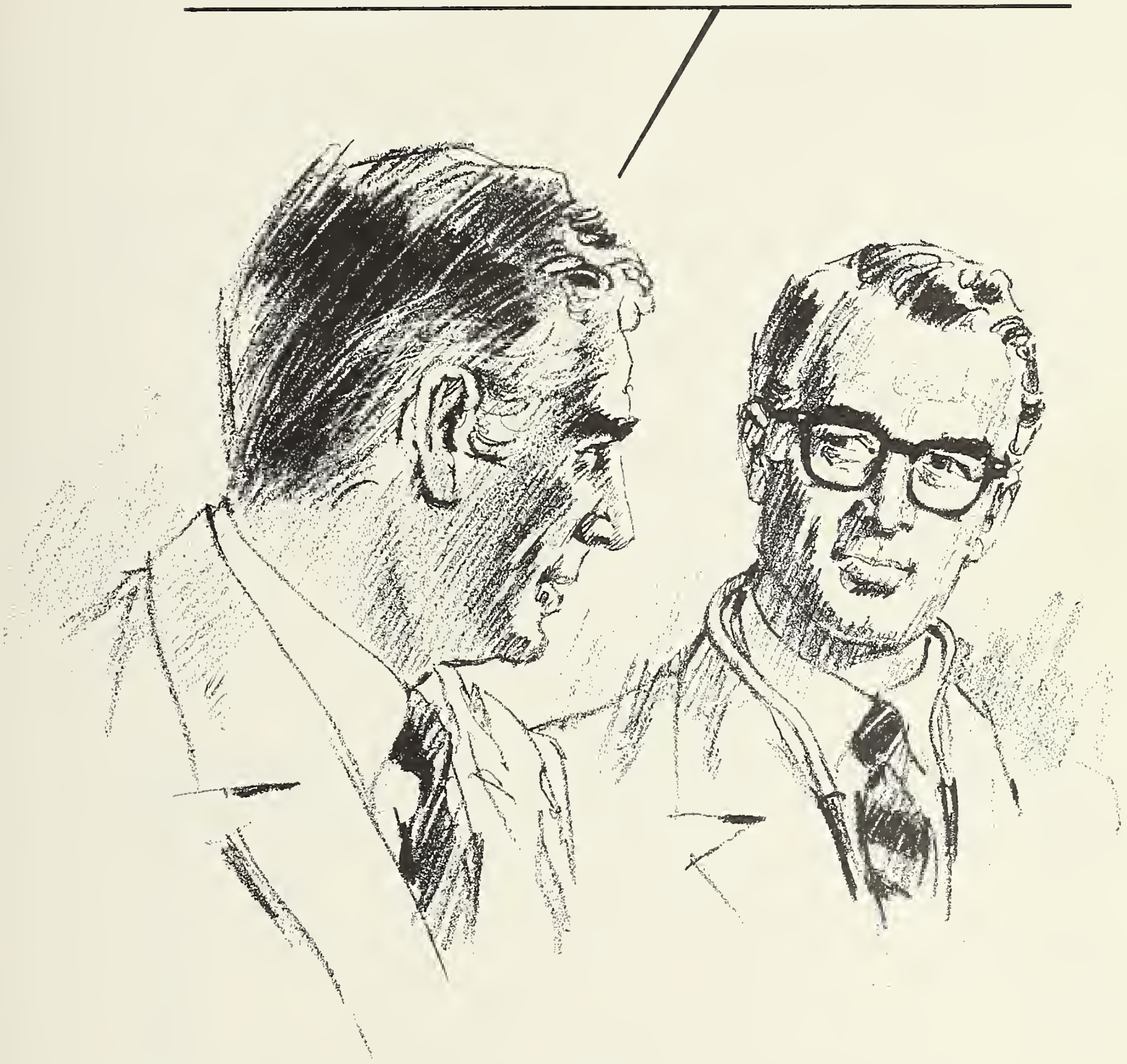

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PRECAUTION: Do not use when symptoms of appendicitis are present and discontinue use if skin rash appears. Dependence on laxatives can result from continued use.

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In memoriam

J. Kenner Bell, MD
Highland Park

Detroit-area gastroenterologist for 40 years, J. Kenner Bell, MD, died Nov. 25 at the age of 73.

Doctor Bell was former doctor for the Highland Park Police Department, and medical director of the Shrine Circus and the Moslem Shrine in Detroit.

Doctor Bell was graduated from the University of Toronto School of Medicine and was affiliated with Hutzel and Receiving hospitals of Detroit and Highland Park General Hospital, where he was a past chief of staff. He had been a member of the council of the Detroit Gastroenterological Society.

A. W. Byrnes, MD
Battle Creek

A. W. Byrnes, MD, former director of the Battle Creek VA Hospital from 1963 to 1967, died Nov. 3 at the age of 61.

Doctor Byrnes, a native of Traer, Iowa, had also served as chief of the neuropsychiatric service at VA facilities in Dayton, Ohio; as chief of physical medicine and rehabilitation service at the Downey, Ill., and Danville, Ill., VA hospitals; as chief of staff at the St. Cloud, Minn., VA hospital and as director of the Knoxville, Iowa, VA hospital.

Doctor Byrnes also had held medical positions with the Army and was a retired lieutenant colonel. He was a graduate of the Iowa University School of Medicine.

Willard Chipman, MD
Detroit

Willard Chipman, MD, former chief of staff at Mt. Carmel Mercy Hospital, died Nov. 30 at the age of 74.

Doctor Chipman was a graduate of Harvard Medical School and had practiced medicine for 50 years. He was a member of the American College of Surgeons, the International College of Surgeons and the Society of Abdominal Surgeons.

William T. Krebs, MD
Grosse Pointe Farms

William Thomas Krebs, MD, a Detroit-area generalist, died Dec. 2 at the age of 63. He had served as medical director for the Hudson Motor Car Co. from 1937-1946.

Doctor Krebs was graduated from University of Michigan Medical School and was affiliated with

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Cottage and Evangelical Deaconess hospitals in Detroit. He was a charter member of the Michigan Industrial Hygienic Society and also was a member of the American Association of Industrial Hygienists.

Herbert K. Kent, MD
Lansing

Retired Lansing physician Herbert K. Kent, MD, died Nov. 4 at the age of 77.

Doctor Kent was a life member of the Ingham County Medical Society and had been on the senior staffs at Sparrow and Ingham Medical hospitals in Lansing.

An enterologist, Doctor Kent was a graduate of Loyola University.

John J. Long, Sr., MD
Southfield

John Joseph Long, MD, Southfield generalist, died Nov. 8 at the age of 66.

Doctor Long was a staff member of Mt. Carmel Mercy Hospital, and had been a member of the Wayne County Medical Society Council. He was graduated from Detroit College of Medicine and was a member of the American Academy of Family Physicians.

Daniel Landron, MD
Jackson

Daniel Landron, MD, Jackson generalist, died Nov. 26 at the age of 63. He was affiliated with W. A. Foote and Mercy hospitals in Jackson. Doctor Landron was a native of Puerto Rico. He was graduated from Temple University School of Medicine.

Doctor Landron was vice president of the Jackson County Doctor's Emergency Service which he helped found. He was a member of the American Academy of Family Physicians.

Harold C. Mitchell, MD
Grand Rapids

Harold C. Mitchell, MD, retired Grand Rapids physician, died Nov. 6 at the age of 70.

Doctor Mitchell had served as chief medical officer at the Michigan Veterans Facility in Grand Rapids, as chief medical officer at Coldwater Training School for Children and chief officer at Ionia Reformatory. He also had been in private practice in Grand Rapids and Bay City.

Doctor Mitchell was a graduate of the University of Toronto Medical School and was a past president of the Mecosta-Osceola-Lake and Branch county medical societies.

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Bradley M. Patten, PhD
Ann Arbor

Bradley M. Patten, PhD, professor and chairman emeritus of the University of Michigan Medical School's anatomy department, died Nov. 8 at the age of 82. Doctor Patten was a member of the Washtenaw County Medical Society.

An internationally recognized researcher in his field, Doctor Patten authored textbooks used worldwide. He is credited with laying the cornerstone of modern embryological teaching and with being one of the top scientists in his field for his pioneering work in time-lapse cinematography for the study of early developmental changes in heart and blood vessels.

Doctor Patten was U-M anatomy department chairman from 1936 to 1958 when he retired.

E. C. Raabe, MD
Morenci

Elmer Charles Raabe, MD, Morenci generalist, was struck and killed by a truck Nov. 11. He was 75.

Doctor Raabe had practiced medicine in Morenci since 1925 and was affiliated with Morenci Area Hospital, where he was chief of staff this year, and Bixby Hospital in Adrian. He was a graduate of Ohio State University School of Medicine.

Doctor Raabe was a past president of the Lenawee County Medical Society.

David Standiford, MD
Bay City

David Standiford, Bay City obstetrician-gynecologist, died Oct. 27 after a long illness. He was 47.

Doctor Standiford was a graduate of the University of Michigan Medical School and was affiliated with Mercy and General hospitals in Bay City. He was certified with the American Board of Obstetrics and Gynecology and was a member of the International Society for the Advancement of Humanistic Studies in Gynecology.

Max O. Wolfe, MD
Detroit

Retired Detroit Psychoanalyst Max O. Wolfe, MD, died Nov. 25 at the age of 74.

Doctor Wolfe was a graduate of Marquette University School of Medicine and had practiced in Detroit until retiring seven months ago. He was a former director of the Haven Sanitarium in Rochester, past Michigan president of the Cornelian Corner and past treasurer of the Detroit Psychoanalytic Society.

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ACTIONS: *Microbiology:* Phenoxymethyl penicillin exerts high *in vitro* activity against staphylococci (except penicillinase-producing strains), streptococci (groups A, C, G, H, L, and M) and pneumococci. Other organisms sensitive to phenoxymethyl penicillin are *Corynebacterium diphtheriae, Bacillus anthracis,* Clostridia, *Actinomyces bovis, Streptobacillus moniliformis, Listeria* monocytogenes, Leptospira, and *Neisseria gonorrhoeae. Treponema pallidum* is extremely sensitive. *Pharmacology:* Phenoxymethyl penicillin is more resistant to inactivation by gastric acid than penicillin G. It may be given with meals and average blood levels are two to five times higher than the levels following the same dose of oral penicillin G. Once absorbed, phenoxymethyl penicillin is about 80% bound to serum protein. Tissue levels are highest in the kidneys, with lesser amounts in the liver, skin, and intestines and small amounts in all other body tissues and cerebrospinal fluid. Only about 25% of the dose given is absorbed. In neonates, young infants, and individuals with impaired kidney function, excretion is considerably delayed.

INDICATIONS: Phenoxymethyl penicillin is indicated in the treatment of mild to moderately severe infections caused by penicillin G-sensitive microorganisms that are sensitive to the low serum levels common to this particular dosage form. Therapy should be guided by bacteriological studies (including sensitivity tests) and by clinical response. Culture and sensitivity testing are especially important in suspected staphylococcal infections because increased resistance has been reported. Phenoxymethyl penicillin is not active against penicillinase-producing bacteria.

Note: Severe pneumonia, empyema, bacteremia, pericarditis, meningitis, and arthritis should not be treated with phenoxymethyl penicillin during the acute stage.

Indicated surgical procedures should be performed.

Medical conditions in which oral penicillin therapy is indicated as prophylaxis: For the prevention of recurrence following rheumatic fever and/or chorea. To prevent bacterial endocarditis in patients with congenital and/or rheumatic heart lesions who are to undergo dental procedures or minor upper respiratory tract surgery or instrumentation.

Note: Oral penicillin should not be used as adjunctive prophylaxis for genitourinary instrumentation or surgery, lower intestinal tract surgery, sigmoidoscopy and childbirth.

CONTRAINDICATION: A previous hypersensitivity reaction to any penicillin.

WARNINGS: Serious and occasionally fatal hypersensitivity (anaphylactoid) reactions have been reported in patients on penicillin therapy. While more frequent following parenteral therapy, anaphylaxis has occurred in patients on oral penicillins. These reactions are more apt to occur in individuals with a history of sensitivity to multiple allergens.

Some individuals with a history of penicillin hypersensitivity reactions have experienced severe hypersensitivity reactions from a cephalosporin. Before therapy with a penicillin, careful inquiry should be made concerning previous hypersensitivity reactions to penicillins, cephalosporins, and other allergens. If an allergic reaction occurs, the drug should be discontinued and the patient treated with the usual agents, e.g., pressor amines, antihistamines and corticosteroids.

PRECAUTIONS: Penicillin should be used with caution in individuals with histories of significant allergies and/or asthma.

The oral route of administration should not be relied on in patients with severe illness, or with nausea, vomiting, gastric dilatation, cardiospasm, or intestinal hypermotility.

Occasional patients will not absorb therapeutic amounts of orally administered penicillin.

In streptococcal infections, therapy must be sufficient to eliminate the organism (10 days minimum); otherwise the sequelae of streptococcal disease may occur. Cultures should be taken following completion of treatment to determine whether streptococci have been eradicated.

Prolonged use of antibiotics may promote the overgrowth of nonsusceptible organisms, including fungi. Should superinfection occur, appropriate measures should be taken

ADVERSE REACTIONS: While the incidence of reactions to oral penicillins is much less than with parenteral therapy, it should be remembered that all degrees of hypersensitivity, including fatal anaphylaxis, have been reported with oral penicillin.

The most common reactions to oral penicillin are nausea, vomiting, epigastric distress, diarrhea, and black hairy tongue. The hypersensitivity reactions reported are skin eruptions (maculopapular to exfoliative dermatitis), urticaria and other serum sickness reactions, laryngeal edema, and anaphylaxis. Fever and eosinophilia may frequently be the only reaction observed. Hemolytic anemia, leucopenia, thrombocytopenia, neuropathy, and nephropathy are infrequent reactions and are usually associated with high doses of parenteral penicillin.

HOW SUPPLIED: Pfizerpen VK (potassium phenoxymethyl penicillin) for Oral Solution. Each 5 ml. of reconstituted solution contains potassium phenoxymethyl penicillin equivalent to 125 mg. (200,000 units) or 250 mg. (400,000 units) of phenoxymethyl penicillin.

125 mg. bottles of 100 ml. and 150 ml.
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Pfizerpen VK (potassium phenoxymethyl penicillin) Tablets. Each tablet contains potassium phenoxymethyl penicillin equivalent to 250 mg. (400,000 units) or 500 mg. (800,000 units) of phenoxymethyl penicillin.

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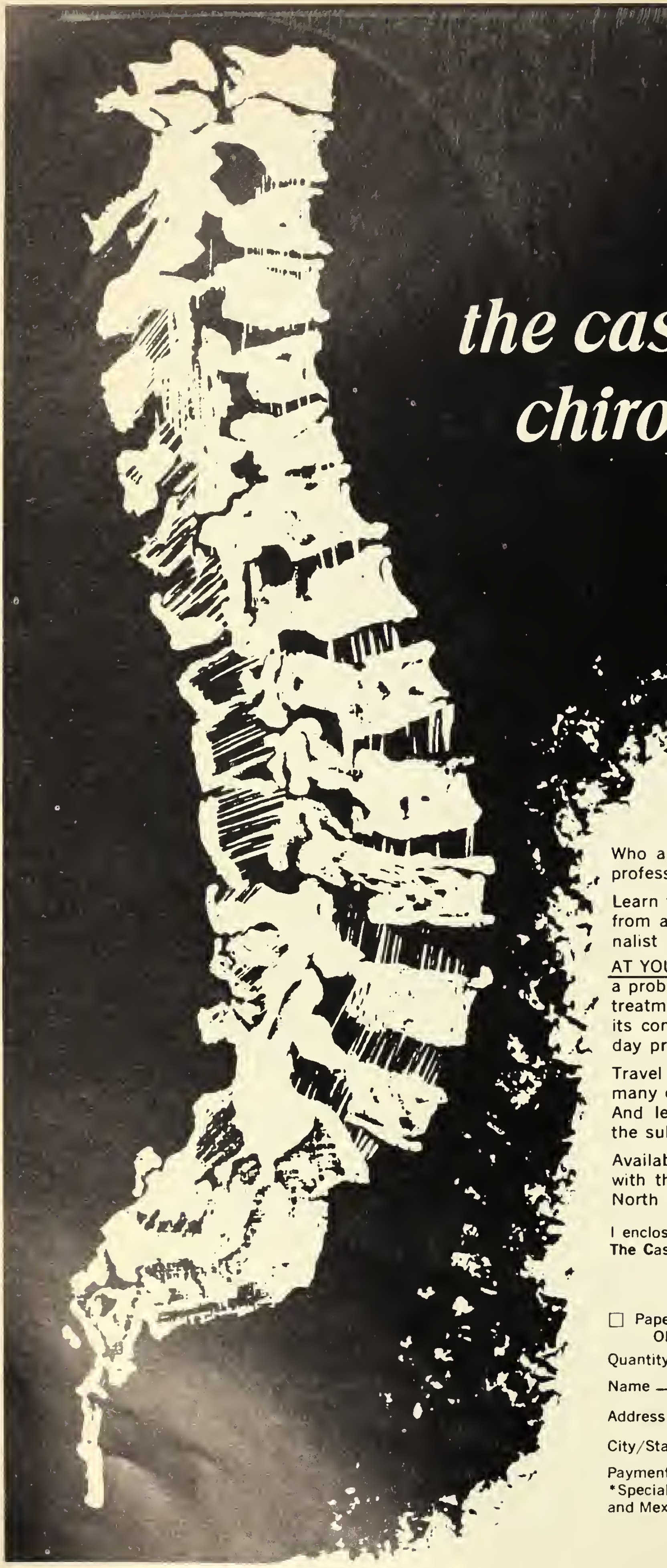

the case against chiropractic

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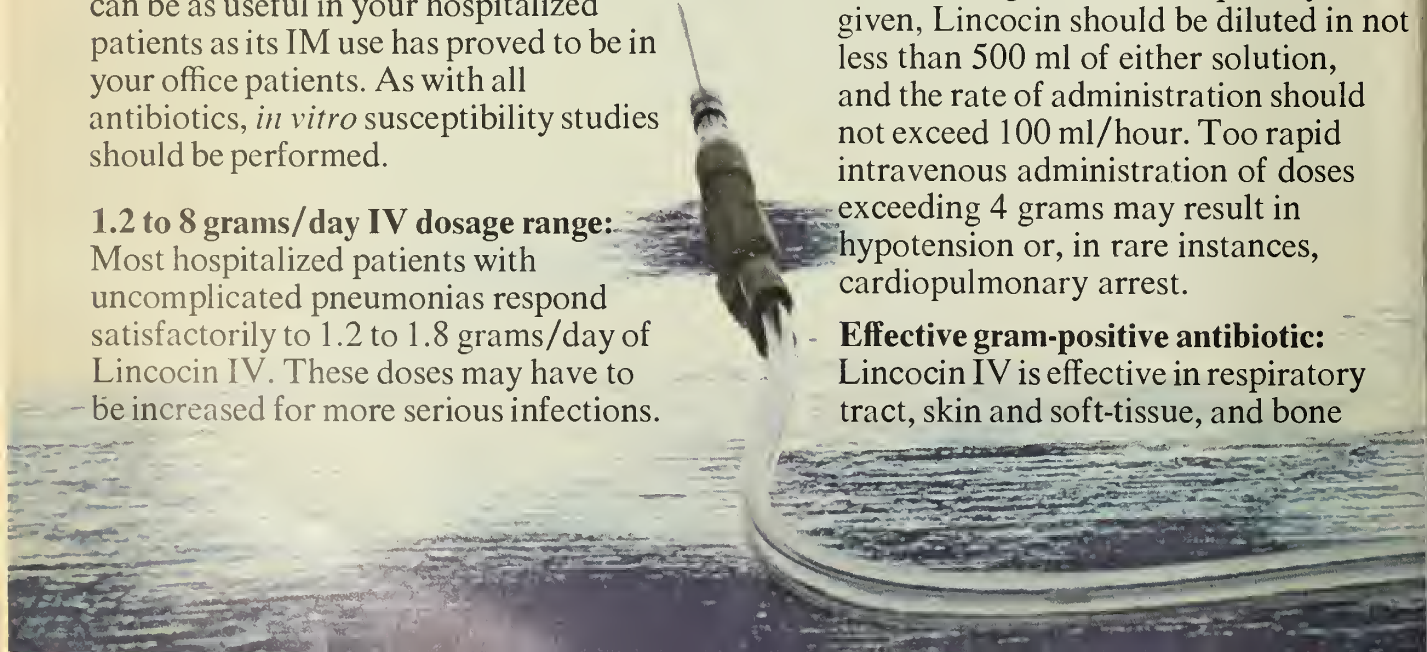
When you select this familiar antibiotic for IV infusion you have available a broad dosage range that hospitalized patients may need.

Intravenous Lincocin (lincomycin hydrochloride, Upjohn), with its 1.2 to 8 grams/day dosage range, covers many serious and even life-threatening infections. Lincocin is effective in infections due to susceptible strains of streptococci, pneumococci, and staphylococci. Lincocin IV therefore can be as useful in your hospitalized patients as its IM use has proved to be in your office patients. As with all antibiotics, *in vitro* susceptibility studies should be performed.

1.2 to 8 grams/day IV dosage range: Most hospitalized patients with uncomplicated pneumonias respond satisfactorily to 1.2 to 1.8 grams/day of Lincocin IV. These doses may have to be increased for more serious infections. In life-threatening situations as much as 8 grams/day has been administered intravenously to adults.

In usual IV doses, Lincocin (lincomycin hydrochloride, Upjohn) should be diluted in 250 ml or more of normal saline solution or 5% glucose in water. But when 4 grams or more per day is given, Lincocin should be diluted in not less than 500 ml of either solution, and the rate of administration should not exceed 100 ml/hour. Too rapid intravenous administration of doses exceeding 4 grams may result in hypotension or, in rare instances, cardiopulmonary arrest.

Effective gram-positive antibiotic: Lincocin IV is effective in respiratory tract, skin and soft-tissue, and bone



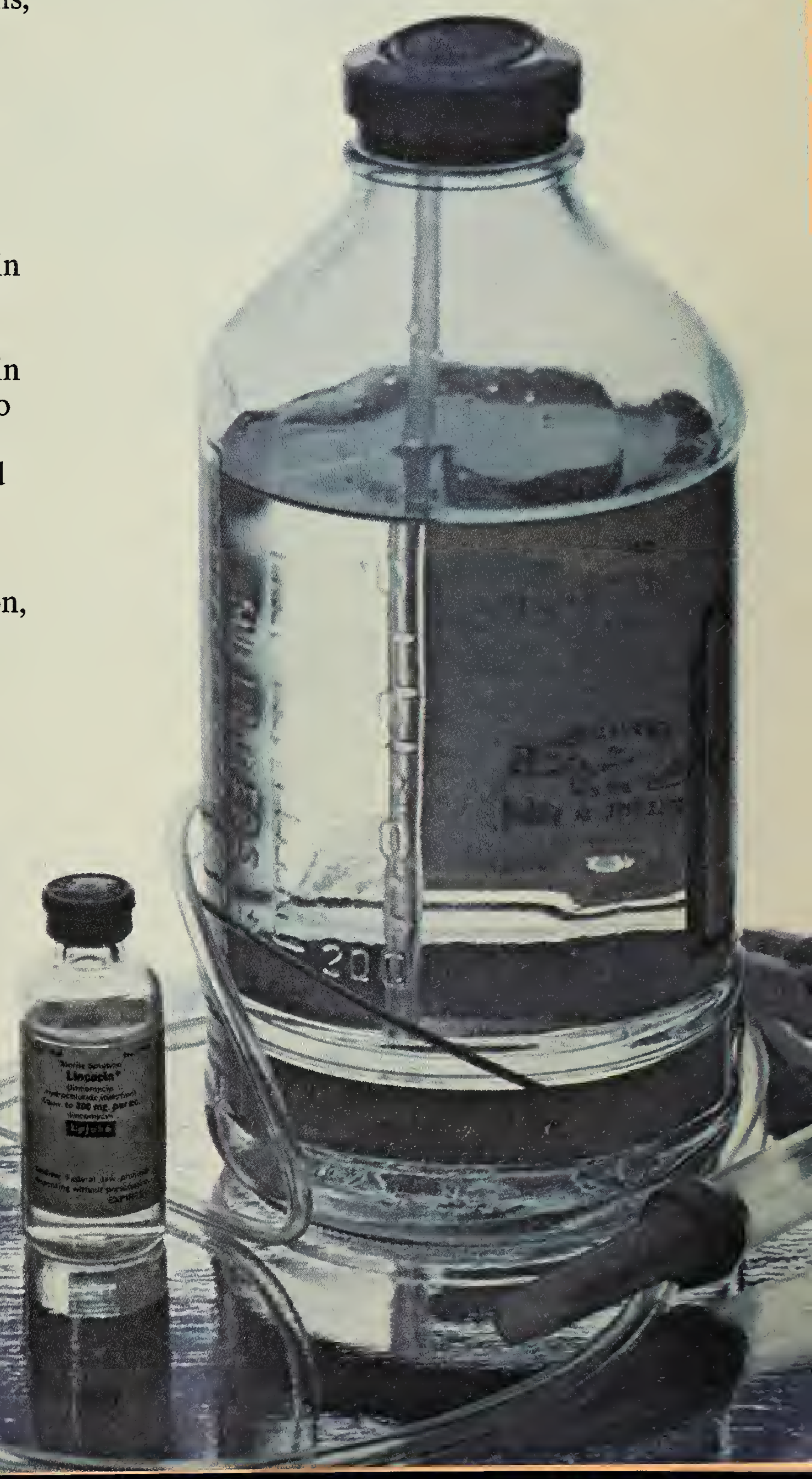
nfections caused by susceptible strains f pneumococci, streptococci, and taphylococci, including penicillin-esistant strains. Staphylococcal strains esistant to Lincocin (lincomycin ydrochloride, Upjohn) have been ecovered. Before initiating therapy, ulture and susceptibility studies should e performed. Lincocin has proved aluable in treating patients hyperensitive to penicillin or cephalosporins, ince Lincocin does not share ntigenicity with these compounds. Iowever, hypersensitivity reactions ave been reported, some of these in atients known to be sensitive to enicillin.

Vell tolerated at infusion site: Lincocin ntravenous infusions have not roduced local irritation or phlebitis, vhen given as recommended. Lincocin s usually well tolerated in patients who re hypersensitive to other drugs. Nevertheless, Lincocin should be used autiously in patients with asthma or ignificant allergies.

n patients with impaired renal function, he recommended dose of Lincocin hould be reduced to 25–30% of he dose for patients with normal idney function. Its safety in regnant patients and in infants ess than one month of age has ot been established.

incocin may be used with other ntimicrobial agents: Since Lincocin s stable over a wide pH range, it is uitable for incorporation in ntravenous infusions; it also may be administered concomitantly with other antimicrobial agents when indicated. However, Lincocin should not be used with erythromycin, as *in vitro* antagonism has been reported.

Lincocin®
Sterile Solution (300 mg per ml)
(lincomycin hydrochloride, Upjohn)
For further prescribing information, please see following page.



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Sterile Solution (300 mg. per ml.)

Lincocin®

(lincomycin hydrochloride, Upjohn)

Up to 8 grams per day by IV infusion for hospitalized patients with life-threatening infections. Lincocin is effective in infections due to susceptible strains of streptococci, pneumococci, and staphylococci. As with all antibiotics, *in vitro* susceptibility studies should be performed.

Each preparation contains:	Lincomycin hydrochloride monohydrate equivalent to lincomycin base
250 mg Pediatric Capsule	250 mg
500 mg Capsule	500 mg
*Sterile Solution per 1 ml	300 mg
Syrup per 5 ml	250 mg

*Contains also: Benzyl Alcohol 9 mg; and, Water for Injection—q.s.

Lincocin (lincomycin hydrochloride) is indicated in infections due to susceptible strains of staphylococci, pneumococci, and streptococci. *In vitro* susceptibility studies should be performed. Cross resistance has not been demonstrated with penicillin, ampicillin, cephalosporins, chloramphenicol or the tetracyclines. Some cross resistance with erythromycin has been reported. Studies indicate that Lincocin does not share antigenicity with penicillin compounds.

CONTRAINDICATIONS: History of prior hypersensitivity to lincomycin or clindamycin. Not indicated in the treatment of viral or minor bacterial infections.

WARNINGS: *CASES OF SEVERE AND PERSISTENT DIARRHEA HAVE BEEN REPORTED AND HAVE AT TIMES NECESSITATED DISCONTINUANCE OF THE DRUG. THIS DIARRHEA HAS BEEN OCCASIONALLY ASSOCIATED WITH BLOOD AND MUCUS IN THE STOOLS AND HAS AT TIMES RESULTED IN AN ACUTE COLITIS. THIS SIDE EFFECT USUALLY HAS BEEN ASSOCIATED WITH THE ORAL DOSAGE FORM BUT OCCASIONALLY HAS BEEN REPORTED FOLLOWING PARENTERAL THERAPY.* A careful inquiry should be made concerning previous sensitivities to drugs or other allergens. Safety for use in pregnancy has not been established and Lincocin (lincomycin hydrochloride) is not indicated in the newborn. Reduce dose 25 to 30% in patients with severe impairment of renal function.

PRECAUTIONS: Like any drug, Lincocin should be used with caution in patients having a history of asthma or significant allergies. Overgrowth of nonsusceptible organisms, particularly yeasts, may occur and require appropriate measures. Patients with pre-existing monilial infections requiring Lincocin therapy should be given concomitant antimonilial treatment. During prolonged Lincocin therapy, periodic liver function studies and blood counts should be performed. Not recommended (inadequate data) in patients with pre-existing liver disease unless special clinical circumstances indicate. Continue treatment of β-hemolytic streptococci infections for 10 days to diminish likelihood of rheumatic fever or glomerulonephritis.

ADVERSE REACTIONS: *Gastrointestinal*—Glossitis, stomatitis, nausea, vomiting. Persistent diarrhea, enterocolitis, and pruritus ani. *Hemopoietic*—Neutropenia, leukopenia, agranulocytosis, and thrombocytopenic purpura have been reported. *Hypersensitivity reactions*—Hypersensitivity reactions such as angioneurotic edema, serum sickness, and anaphylaxis have been reported, sometimes in patients sensitive to penicillin. If allergic reaction occurs, discontinue drug. Have epinephrine, corticosteroids, and antihistamines available for emergency treatment *Skin and mucous membranes*—Skin rashes urticaria, vaginitis, and rare instances of exfoliative and vesiculobullous dermatitis have been reported. *Liver*—Although no direct relationship to liver dysfunction is established jaundice and abnormal liver function tests (particularly serum transaminase) have been observed in a few instances. *Cardiovascular*—Instances of hypotension following parenteral administration have been reported particularly after too rapid IV administration. Rare instances of cardiopulmonary arrest have been reported after too rapid IV administration. If 4.0 grams or more administered IV, dilute in 500 ml of fluid and administer no faster than 100 ml per hour *Special senses*—Tinnitus and vertigo have been reported occasionally. *Local reactions*—Excellent local tolerance demonstrated to intramuscularly administered Lincocin (lincomycin hydrochloride). Reports of pain following injection have been infrequent Intravenous administration of Lincocin in 250 to 500 ml of 5% glucose in distilled water or normal saline has produced no local irritation or phlebitis.

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THE HIGH RISK FETUS

Recent advances in our knowledge of placental circulation and fetal physiology have made it possible to correlate certain clinical situations in the mother with their high perinatal mortality and morbidity rates. It is important that physicians learn to recognize these *high risk* situations *early* and provide the special care and precautions necessary to prevent fetal and neonatal loss. In many patients the increased risk is due to the impaired feto-placental circulation prior to the onset of labor. In normal labor, the placental circulation almost stops for the duration of the uterine contraction, but promptly returns to normal between contractions and produces no fetal distress. In abnormal situations, when the placental circulation is already marginal before the onset of labor, oxygenation may be severely limited once contractions become frequent.

We can anticipate increased fetal risk in the following conditions:

1. Diabetes mellitus
2. Chronic hypertension
3. Acute toxemia
4. Post-maturity
5. Erythroblastosic fetalis
6. Exhaustion, dehydration and acidosis of prolonged labor
7. Anemia
8. Maternal sepsis (amnionitis, Septicemia, pyclonephrisis, pneumonia)
9. Drug addiction

Early and careful care of these patients should be undertaken in hospitals staffed and equipped to deal with all obstetrical contingencies as well as the critically ill newborn.

Some laboratory help in evaluating the well-being of the feto-placental unit prior to the onset of labor is available. Serial measurements of urinary estriol excretion that remain above baseline levels have correlated well with the favorable condition of the fetus. Hopefully, the future will bring better, more specific placental function tests.

When a trial of labor is elected in these patients, recognition of fetal distress requires careful observation of the fetal heart rate by frequent auscultation or fetal monitoring equipment. (See subsequent "fetal distress" card.)

Treatment of fetal distress arising in labor includes: 1) changing the patient's position from supine to lateral to eliminate any compression of abdominal and pelvic vessels, 2) oxygen given to the mother by mask at 6 liters/min., 3) intravenous hydration and glucose administration to correct maternal and fetal acidosis. If these simple measures fail to reverse the abnormal fetal bradycardia, immediate steps should be taken to deliver the infant vaginally or by Cesarean section.

Welcome to MSMS

Members of the Michigan State Medical Society join in welcoming the following new members into a progressive state medical organization. MSMS is dedicated to promoting the science and art of medicine, the protection of the public health, and the betterment of the medical profession. Each new member is encouraged to join with other MSMS members at both the local and the state levels in achieving these goals.

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Billy B. Baumann, MD, 2021 Klingensmith #7, Pontiac 48053
Ferdinand M. Bumagat, MD, Metropolitan Hospital, Detroit 48206
Vicente T. Castillo, MD, 3901 Beaubein, Detroit 48201
Luis A. Chavez, MD, 690 Mullett St., Detroit 48226
Yoon Ha Cho, MD, 1400 Chrysler Expwy., Detroit 48207
Ralph R. Cook, MD, W-5641 University Hosp., Ann Arbor 48104
Douglas E. Cox, MD, 2355 Monroe, Dearborn 48124
Ben Droblas, MD, 8233 W. Chicago, Detroit 48204
Milagros T. Ebreo, MD, 31772 Allerton Dr., Birmingham 48009
Daniel C. English, MD, Dept. of Surgery, MSU College of Human Med., East Lansing 48823
Abdul Fayyad, MD, 1322 E. Michigan #318, Lansing 48912
Julian Go., Jr., MD, 27537 Parkview, Warren 48092
Alfred C. Hanscom, MD, 197 N. Washington, Battle Creek 49017
Karl R. Herwig, MD, Dept. of Urology, Univ. Medical Center, Ann Arbor 48104
Eugene Ho, MD, Wyandotte General Hosp., Wyandotte 48192
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Arturo D. Imperial, MD, 770 Fisher Building, Detroit 48202
Milo L. Johnson, MD, Sparrow Hospital, Radiology Dept., Lansing 48902
Samba Jung, MD, 5571 Parkview Dr. C-1 #304, Clarkston 48016
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Fatella L. Lessani, MD, St. Mary's Hospital, Livonia 48154
Frederick S. Lim, MD, 806 W. Sixth Ave., Flint 48503
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Sound Off

Why does Michigan need a foundation?

By Brooker L. Masters, MD
Chairman, MSMS Council

There are at least 12 proposals before Congress at the present time which deal with the provision and financing of health care. Although it seems certain that not one of these bills will become law this year, and possibly not next year, it is inevitable that Congress will, sooner or later, vote on a measure for national health insurance—probably one that includes specific features of several different bills already introduced.

The one thing that most all of these bills have in common is the demand for cost and quality control of health care services through peer review.

True "peer" review requires that the work of physicians be reviewed by other physicians, not by bureaucratically-appointed representatives of labor, business, government, or the public, who have no qualifications for this task. MSMS has an operating peer review program and is, in fact, ahead of some of its sister state organizations in this area. In reality, however, Michigan has only scratched the surface in this relatively new concept.

Local and regional peer review committees must do more than merely exist. Their members must be trained in the methods of operation. Hospital utilization review must be encouraged and stimulated to reach its peak of effectiveness. It must be convincingly demonstrated to the physicians of Michigan that peer review is not a punitive mechanism, but rather an educational program which will encourage physicians who have not "kept up," to take the necessary remedial steps.

There are strong indications from Washington that medical associations themselves would not be authorized to perform this review function, but that a separate organization (foundation) sponsored by a state association could be awarded contracts to carry out this responsibility.

With this issue of MICHIGAN MEDICINE, MSMS members will find greater emphasis on the viewpoints of Michigan physicians. On these pages we begin a new, four page, monthly section in which the state's doctors may "sound off."

Doctor Masters

The demand for experimentation in alternate systems of health care delivery is present and growing stronger every day. The physicians in Michigan need to keep abreast of these developments, advise and consult with those who promote them, and make very sure that their voice is heard so that they may maintain some control over their own destiny. We must guard against those organizational patterns which suggest non-medical control over medical services.

* * *

These things an individual physician cannot do for himself. Nor can his medical association legally become involved in many of these areas without placing its tax exempt status in jeopardy. A foundation can do these things for him.

Many health insurance policies sold in this State, in many instances, offer substandard coverage. Physicians should be interested in seeing that this situation is corrected. A foundation could develop minimum standards of coverage for health insurance and use its influence and good offices to see that substandard policies are upgraded or removed from the market.

Some foundations are designed to contract with government and insurance carriers to administer programs, including the processing of claims and writing checks. Others have (entered) contracts to set up prepaid group health organizations. These are not our purposes, but the beauty of the foundation concept is that it can be set up to accomplish whatever purpose its members direct.

* * *

The purpose envisioned for our Foundation is to contract with health insurers and governmental agencies to perform effective peer review by (1) establishing guidelines that insure quality medical care at a reasonable cost and (2) reviewing cases based upon exception reporting that fall outside established norms. The actual peer review work will be done by local and area review committees.

The Foundation should, however, have freedom of action and purpose to allow it, within all legal bounds, to engage in such activities as may be necessary to maintain our position of leadership in health matters in Michigan in keeping with developments in the legislative, social or medical fields.

The Bylaws for the proposed MSMS Foundation have been carefully drawn to insure that the control of its activities remain with physicians:

1. Members of the Michigan State Medical Society and the Michigan Association of Osteopathic Physicians and Surgeons are automatically participating members of the Foundation. There is no coercion because a participating member may resign his membership in the Foundation at any time.
2. There are 18 administrative members who control the activities of the Foundation. Twelve are provided by MSMS and six are provided by the MAOPS.
3. The twelve M.D. administrative members are composed of MSMS officers plus the Chairman and Vice-Chairman of The Council and six members elected at large by the MSMS membership.
4. The eighteen administrative members elect the Foundation nine member Board of Trustees. Six trustees must be participating members from MSMS and three from MAOPS.
5. Any trustee may be removed from office by the affirmative vote of two-thirds of the administrative members or two-thirds vote of the trustees.
6. Officers of the Foundation are elected by and serve at the pleasure of the Board of Trustees.
7. A majority of participating members may rescind any prior policy decision of the officers or trustees.
8. Twenty or more participating members may petition the corporation to amend its Bylaws and these petitions must be considered and voted upon by the administrative members.
9. The corporation at any time may be dissolved by a two-thirds vote of the participating members at a meeting of 49% of the total membership.

The Foundation approach is medicine's best hope of shaping a future that will afford freedom to deliver quality health services and provide consumer safeguards. Several state medical societies with large physician population, including Illinois and Pennsylvania, have already established their state foundations. We must act now before it is too late.

Press kudos for Kent physicians

It was no remarkable coincidence that on the front page of last Monday's *Press* there appeared two stories, almost side by side recounting the efforts of local doctors aiding the police in two rescue attempts. Less than a week before the twin incidents, the Patrolman's Wives Club singled out 20 Grand Rapids physicians for special commendation for similar activities.

The letters that went to the 20 doctors cited them for "making the Grand Rapids police emergency units and first-aid training the best in the country." They then went on to express the hope of not only the policemen's wives but of the Police Department and the public generally that the doctors would continue their close association with the policemen "to fulfill the never-ending need for the best emergency first-aid training and services."

In the two most recent cases of doctor-police cooperation, one of the most active members of the police emergency unit program, Dr. Lee Pool, hurried to the scene of a shooting on Franklin St., SW, in answer to a police call. His efforts to restart the heart of a man who had been shot three times failed, but Pool gave it his best. Not many hours later, Dr. John Wilson, another active member of the unit, proved more successful when, answering a police call, he hastened to Bridge St. bridge, where, at some peril to his own life, he helped the police to prevent a woman from leaping into the river.

Drs. Pool and Wilson are among the 20 or so local physicians who regularly ride with the police emergency vehicles on weekends and often on other nights, who have two-way police radios in their cars and even offices and who almost automatically respond to any police pleas for their services. They are not paid for their efforts.

The doctor emergency service was conceived by Dr. C. Mark Vasu, who, of course, deserves a large measure of the credit for its success. But never has it been more true than in this instance that it takes many willing hands to make such a program work. And this program requires not only willing but extraordinary skilled hands that are not in abundant supply in any community. The Patrolman's Wives Club says this program is the best of its kind in the country. We don't think there is any doubt on that score. In fact, there are few communities that can boast anything similar to it.

Grand Rapids Press, October 28, 1971
(Editorial, reprinted by permission)

Hello, Doctor Coye; Thank you, Doctor Evans

Doctor Tallant

By Edward J. Tallant, MD
MSMS Publication Committee Chairman

Michigan's medical doctors extend a warm, welcoming handshake to the new dean of the Wayne State University School of Medicine, Robert D. Coye, MD.

At the same time, we are quick to congratulate and praise those men who have led the WSU medical school during the two years since the resignation of former dean Ernest D. Gardner, MD, in March, 1970.

Tommy N. Evans, MD, acting dean, has ably commanded the day-to-day work of the medical school, and presided over such high points as the construction of the new Scott Hall of Basic Medical Sciences, the ground-breaking and early construction of the C. S. Mott Center for Human Growth and Development and a 50 percent increase in the number of entering freshmen medical students at WSU.

For his work as WSU acting dean, Doctor Evans was awarded a 1971 MSMS Certificate of Commendation.

We offer our support and cooperation to you, Dean Coye, as you begin your work in a challenging time when medical schools are being called upon to produce more and better physicians to meet the rising demand for medical care across the nation.

In 1971, the WSU entering freshman class numbered 208 students, placing it among the top 10 in size among the medical schools in the country. If finances are made available soon to acquire additional faculty, the WSU entering medical class could rise to 256 by 1973, placing it among the top two or three in the nation.

We are pleased with your qualifications as former assistant and then associate dean of the University of Wisconsin Medical School.

Doctor Coye comes to Michigan with high qualifications. From 1966-70 he served as associate dean of the University of Wisconsin Medical School. From 1960 until 1966 he was assistant dean. He has been a full professor of pathology at Wisconsin since 1968.

Certified in pathological anatomy in 1958, Doctor Coye is a member of the American Society of Experimental Pathology and the American Association of Pathologists and Bacteriologists.

He and his wife, Janet, have two daughters, Carol, 19, and Joel, 23, and a son, Peter, 21.

When Doctor Coye accepted his new position, he said he was impressed with the basic science, clinical and research facilities at the medical school.

"The WSU School of Medicine and the developing Detroit Medical Center are contributing much to the teaching, research, and health care needs of Detroit, the State of Michigan and the nation at large," he said. "I know they will continue to play a major role in helping to solve many of the health care problems confronting us today."

We look forward to working with you to solve these problems, Dean Coye.

Doctor McGrath

We do not belong to the organization; it belongs to us

By William B. McGrath, MD
Phoenix, Ariz.

The following article is reprinted with permission, from the September issue of *Arizona Medicine*.

The structure of an organization is the sum of the individuals who comprise it. The function of an organization is to lessen individuality in the pursuit of cooperation and efficiency. It is true of any society: the stronger the organization, the weaker its members. This is a looming dilemma which confronts every one of us, in any trade or profession and in government.

A man cannot make a living without belonging (sic) to some organization, thereby relinquishing some of his independence. Count, for illustration, the number of associations which a licensed physician has to join—ingratiating himself, submitting his qualifications, taking examinations, requesting "privileges," attending mandatory meetings, paying dues and special assessments, accepting the bylaws and a hundred restrictive rules and regulations; dreading that at any time his fitness and therefore his very livelihood will be brought into question by self-appointed peers or anonymous committees.

He will be graded and stamped and certified like beef in a packing house. Above him in the vertical pecking order will be the courtesy staff, the honorary staff, the consulting staff, the visiting staff, the active staff, the teaching staff, and finally the "chiefs" of services, the real in-group, employed by the hospital.

There is no grading without degrading. Subordination of the individual is perhaps even worse in the military and in industry and commerce. An employee had better contribute a specified amount to a "voluntary" charity drive. The board arrogates the right to require a teacher to take a loyalty oath. An executive must be willing (a contradiction in terms) to undergo psychological testing, and his whole personal life will come under evaluative investigation. Everyone rises at the entrance of the judge in his medieval robes, and we address him as "your honor," but he must "run" for office.

Organization for the sake of efficiency is witlessly dragging mankind back to feudalism: people become serfs and vassals, paying homage and fees and service for the "privilege" of working.

Impotent and oppressed, the individual cannot resist the emasculating power of organization. He has to join and submit. Repressing the instinctive (stallion) goal of self-determination and free enterprise, he will ignore his serfdom or rationalize. So he will forgive us, sweetly, and protest that an effective team must have pyramidal organization, must have leadership and followers, a hierarchical system.

We have no real proof that this is so since any other approach has never had sufficient trial. In either case our technologies are advancing so overwhelmingly that we could afford to sacrifice a little efficiency in the interest of individual integrity. We had better! Machismo is not measured by status or proven on the golf course.

Organized medicine at any level ought not lead or follow the subservient inclinations of the masses. The hackneyed phrase, "delivery of health services," suggests that medicine is a commodity—perhaps to be sold or traded for coupons in a chain of supermarkets? It is the same old epistemological error: Medicine is not a service; it is a positive function.

And the function of organized medicine is to preserve and enrich the health of society. When organization itself begins to undermine the health of society, then it is our duty to attack organization.

Any illness of society can hardly be different from the illness of an individual. Our country seems to be organically sound. We can defend ourselves against invasion; the drinking water is pure and our sewage systems are better than average; we have more than our share of food and housing.

But no one would dispute that collectively as well as individually we are nervous.

Now in any functional disorder, in any case of nervousness, what does the psychiatrist look for? Invariably he will find a basic loss of self-esteem. All the symptoms and all the defense mechanisms seem to derive from the losing of self-esteem.

It is up to the professions to set the restorative example. Our own societies and associations should be as loosely knit as possible, freely cooperative, never intimidating or coercive. The physician's connection with the hospital, for example, could well do without most of the ranking and regulating. The fact of being on a staff (just yes or no) should presume the individual's good judgment and he should be quite free to work according to his abilities.

In almost every issue and at every opportunity the educated person should stand and vote against more administration, more management, more regimentation. He should vigorously oppose anything that smacks of rigidity or grading or group coercion.

The lifeblood of mental health is self-esteem. When we are mindful of this, then both professionally and privately each of us will always discourage any kind of subordination. We will not invite or permit any human being to enter a master-servant relationship which would allow him to be obsequious, subservient.

It is not just a play on words to insist that the individual does not belong to the organization or work for it. He works for himself and the organization belongs to him. He must never be treated or view himself as a member, in the sense of an arm or leg. He is a whole man. In or out of the organization a man can work for himself in whatever job, using his own skills and resources. He must get back the feeling that he is tilling his own small plot of land. When he cooperates with his fellows it is because they are his fellows, and they and he are scornful of status or rank. Such a subtle change of attitude will help to restore the self-esteem of the individual and of the society to which he belongs—no; which belongs to him!

Doctor McGrath is a member of the Publishing Committee and Editorial Board of the Arizona Medical Association, Inc.

EDIGRAMS
ATE NEWS FROM THE MICHIGAN STATE MEDICAL SOCIETY

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ichigan Medicine
January 28, 1972, Volume 71, Number 3
Michigan State Medical Society
Reading Time: 2 Mins. 45 Seconds

FFORTS ARE UNDERWAY to tell Governor Milliken and the State Legislature bout the MSMS Council's "extreme displeasure" over the Governor's budget essage proposal to discount all Medicaid payments to physicians by 3% f paid in 30 days. The matter was discussed by The Council Jan. 26 and four-step action program to protest the proposed cut was approved.

The entire MSMS membership will be sent a special mailing with perinent data and with suggestions for individual action. Watch for the ailing.

The Governor alleges this discounting proposal can reduce state costs y $2 million and federal costs by a further $2 million. If approved by he Legislature, the cut would become effective with the next fiscal year, uly 1, 1972.

MEMBERS OF THE MSMS House of Delegates will receive Draft #7 of the proposed bylaws for a MSMS-sponsored foundation early in February for study before the spring meeting of the House. The MSMS Committee on Utilization Review and Health Insurance Problems developed Draft #7 after reactions from various delegates and component societies to Draft #6. The MSMS Council on Jan. 26 received Draft #7 and voted to "present it to the House of Delegates for approval."

XPLANATION OF PRICE COMMISSION 2.5% CEILING:

The government has published fee-freeze regulations ordered by the rice Commission under Phase II of the President's new economic policies nd the MSMS Bureau of Economic Information provides these interpretations:

1. Physicians are held to fees in effect on Nov. 14, 1971. Any increases in fees up to a maximum of 2.5% must be justified on the basis of llowable cost (overhead) increases. Such increases are permissible only f they don't increase the doctor's profit margin (the difference between he practice's gross income and net income) and only to the extent they re not offset by increased productivity.

2. Requests for exceptions to the guidelines may be directed to:

District Director
Economic Stabilization Program of the IRS
2011 Park Avenue Building
Detroit, Michigan 48226

3. Incorporated physicians' salaries (including benefits) cannot be ncreased more than 5.5%. Exempt from the 5.5% ceiling are automatic or lanned "longevity" increases in salaries for physicians in medical cororations, provided this salary plan existed before Nov. 14, 1971. But, he corporation is restricted to the 2.5% fee guidelines.

4. The individual's request must state the reason for the request, nd indicate to the Commission that a serious hardship or gross inequity s in effect with the guidelines.

The AMA has protested the fee-freeze regulations as being "discriminatory" y singling out providers of health care. The AMA declares that the guidelines "violate the principles of equal treatment and fair play."

COMPONENT SOCIETY SECRETARIES are being invited to a special workshop at MSMS on March 1. A similar workshop for presidents-elect of the county societies on Dec. 9 was rated very informative.

MSMS COUNCIL on Jan. 26 received a comprehensive report from Chairman Brooker L. Masters, MD, about his testimony before the national Democratic Policy Council's Subcommittee on Health in Detroit, Jan. 12. (A copy of the testimony was sent to all MSMS members as Vol. 71, Issue #1 of Michigan Medicine.) Doctor Masters reported that "there was a parade of providers and consumers at the hearing who argued for pluralism, new ideas, flexibility, medical education, more physicians and better distribution of doctors." One Democratic congressman who testified supported the Kennedy-Griffiths bill. Doctor Masters told The Council that "the only comments I have received from fellow doctors since the hearing have been favorable."

MSMS WILL PRESENT A STATEMENT at a "Hearing on Malpractice Insurance Problems" being called at the request of MSMS by the State Insurance Commission in Lansing, Feb. 28. The hearing will bring together medical, legal and insurance interests to express views. MSMS Councilor Frank Bicknell, MD, Detroit, and Fredrick Weissman, MD, Detroit, chairman of the MSMS Committee on Professional Insurance, will represent MSMS. Insurance Commissioner Van Hooser says the hearing "could also establish a sound foundation for evaluating future changes in the area of malpractice insurance."

THE REPORT OF the Phase II membership opinion survey is being completed now by the Alexander Grant Company and will be submitted to the MSMS Council and House of Delegates. The Council will refer the report to appropriate committees to evaluate the conclusions and recommendations. Ten members of the MSMS Council met with survey directors Jan. 25 to discuss the findings and preliminary draft of the report.

PARTICIPATION IS NOW being sought for the 1972 Student American Medical Association-Medical Education and Community Orientation summer project which again will place medical students in community hospitals for 10-week periods. The program is designed to provide students with valuable learning experiences and introduce them to medical practice in Michigan communities. For additional information about the SAMA-MECO program, contact the MSMS Education Liaison Committee.

A NINE-MEMBER board to review requests by hospitals and other health care institutions to exceed the 6% price limit established by the Price Commission has been appointed by the Governor. He selected members of the present State Comprehensive Health Planning Council as the review group.

THE MICHIGAN DEPARTMENT of Social Services recently contracted with the Model Neighborhood Comprehensive Health Program, Inc. (Detroit) to provide comprehensive, preventive medical and health services to 10,000 Group I Medicaid beneficiaries. The program commences on March 1 as a demonstration project. Details will be in the Mar. issue of Michigan Medicine.

Jan. 28, 1972 Vol. 71, No. 3

Michigan
Medicine

MICHIGAN STATE MEDICAL SOCIETY

Published three times each month and four times in December and January, 38 issues, by the Michigan State Medical Society as its official journal. Second class postage paid at East Lansing, Mich. and at additional mailing offices. Yearly subscription rate, $9.00. Printed in USA. All communications should be addressed to the Publications Committee, Michigan State Medical Society, 120 West Saginaw Street, East Lansing, Michigan 48823. © 1972 Michigan State Medical Society. Phone: Area Code 517, 337-1351.

EDITOR: HERBERT A. AUER

Second Class Postage Paid at East Lansing, Mich.
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Michigan Medicine

OFFICIAL JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY • VOLUME 71, NUMBER 4 • JANUARY, 1972

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Published four times a month in December and January, three times all other months, 38 issues, by the Michigan State Medical Society as its official journal. Second class postage paid at East Lansing, Mich., and at additional mailing offices. Yearly subscription rate, $9.00; single copies, 80 cents. Additional postage: Canada, $1.00 per year. Printed in USA. All communications relative to manuscripts, advertising, news, exchanges, etc., should be addressed to Judith Marr, Managing Editor, Michigan State Medical Society, 120 West Saginaw Street, East Lansing, Michigan 48823. Phone Area Code 517, 337-1351. © 1972 Michigan State Medical Society. Directory artwork of MSMS Headquarters by Maripat Kreski, junior art student at Eastern Michigan University.

Guide to Help Locate Cities within the Counties

This guide matches up the counties for Michigan communities containing doctors.

Ada (Kent)
Addison (Lenawee)
Adrian (Lenawee)
Albion (Calhoun)
Algonac (St. Clair)
Allegan (Allegan)
Allendale (Ottawa)
Allen Park (Wayne)
Alma (Gratiot)
Almont (Lapeer)
Alpena (Alpena)
Ann Arbor (Washtenaw)
Augusta (Kalamazoo)

Bad Axe (Huron)
Baldwin (Lake)
Bangor (Van Buren)
Baraga (Baraga)
Bark River (Delta)
Battle Creek (Calhoun)
Bay City (Bay)
Bay View (Emmet)
Bear Lake (Manistee)
Belding (Ionia)
Bellaire (Antrim)
Belleville (Wayne)
Benton Harbor (Berrien)
Berkley (Oakland)
Berrien Center (Berrien)
Berrien Springs (Berrien)
Bessemer (Gogebic)
Beulah (Benzie)
Big Rapids (Mecosta)
Birch Run (Saginaw)
Birmingham (Oakland)
Blanchard (Isabella)
Blissfield (Lenawee)
Bloomfield Hills (Oakland)
Bloomingdale (Van Buren)
Boyne City (Charlevoix)
Branch (Mason)
Breckenridge (Gratiot)
Bridgeport (Saginaw)
Bridgman (Berrien)
Brighton (Livingston)
Bronson (Branch)
Brooklyn (Jackson)
Brown City (Sanilac)
Buchanan (Berrien)
Byron Center (Kent)

Cadillac (Wexford)
Caledonia (Kent)
Calumet (Houghton)
Camden (Hillsdale)
Capac (St. Clair)
Carleton (Monroe)
Caro (Tuscola)
Caseville (Huron)
Cass City (Tuscola)
Cassopolis (Cass)
Cedar Springs (Kent)
Center Line (Macomb)
Centreville (St. Joseph)
Champion (Marquette)
Charlevoix (Charlevoix)
Charlotte (Eaton)
Chassell (Houghton)
Cheboygan (Cheboygan)
Chelsea (Washtenaw)
Chesaning (Saginaw)
Clare (Clare)
Clarkston (Oakland)
Clawson (Oakland)
Clinton (Lenawee)
Clio (Genesee)
Coldwater (Branch)
Coleman (Midland)
Coloma (Berrien)
Colon (St. Joseph)
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Dundee (Monroe)
Durand (Shiawassee)

Eagle Harbor (Keweenaw)
East Detroit (Macomb)
East Jordan (Charlevoix)
East Lansing (Ingham)
East Tawas (Iosco)
Eaton Rapids (Eaton)
Ecorse (Wayne)
Edmore (Montcalm)
Edwardsburg (Cass)
Elk Rapids (Antrim)
Elkton (Huron)
Eloise (Wayne)
Elsie (Clinton)
Engadine (Mackinac)
Escanaba (Delta)
Essexville (Bay)
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Fairgrove (Tuscola)
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Houghton (Houghton)
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Imlay City (Lapeer)
Indian River (Cheboygan)
Inkster (Wayne)
Ionia (Ionia)
Iron Mountain (Dickinson)
Iron River (Iron)
Ironwood (Gogebic)
Ishpeming (Marquette)
Ithaca (Gratiot)

Jackson (Jackson)
Jamestown (Ottawa)
Jonesville (Hillsdale)

Kalamazoo (Kalamazoo)
Kalkaska (Kalkaska)
Keego Harbor (Oakland)
Kent City (Kent)
Kinde (Huron)
Kingsford (Dickinson)

Lake City (Missaukee)
Lakeland (Livingston)

Lake Odessa (Ionia)
Lake Orion (Oakland)
Lakeview (Montcalm)
Lambertville (Monroe)
LAnse (Baraga)
Lansing (Ingham)
Lapeer (Lapeer)
La Salle (Monroe)
Lathrup Village (Oakland)
Laurium (Houghton)
Lawrence (Van Buren)
Lawton (Van Buren)
Leonidas (St. Joseph)
Leslie (Ingham)
Lincoln Park (Wayne)
Linden (Genesee)
Litchfield (Hillsdale)
Livonia (Wayne)
Lowell (Kent)
Ludington (Mason)
Luther (Lake)
Luzerne (Oscoda)

Mackinaw Island (Mackinac)
Madison Heights (Oakland)
Manchester (Washtenaw)
Manistee (Manistee)
Manistique (Schoolcraft)
Manitou Beach (Lenawee)
Marcellus (Cass)
Marine City (St. Clair)
Marion (Osceola)
Marlette (Sanilac)
Marquette (Marquette)
Marshall (Calhoun)
Martin (Allegan)
Marysville (St. Clair)
Mason (Ingham)
Mecosta (Mecosta)
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Memphis (St. Clair)
Menominee (Menominee)
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Millington (Tuscola)
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Monroe (Monroe)
Montague (Muskegon)
Montrose (Genesee)
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Mount Clemens (Macomb)
Mount Morris (Genesee)
Mount Pleasant (Isabella)
Muir (Ionia)
Mullet Lake (Cheboygan)
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Muskegon (Muskegon)
Muskegon Heights (Muskegon)

Nashville (Barry)
Negaunee (Marquette)
Newaygo (Newaygo)
Newberry (Luce)
New Buffalo (Berrien)
New Era (Oceana)
New Port (Monroe)
Niles (Berrien)
North Branch (Lapeer)
North Muskegon (Muskegon)
Northport (Leelanau)
Northville (Wayne)
Norway (Dickinson)

Oak Park (Oakland)
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Olivet (Eaton)
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Onsted (Lenawee)
Ontonagon (Ontonagon)
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Otisville (Genesee)
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Pentwater (Oceana)
Petoskey (Emmet)
Pigeon (Huron)
Pinckney (Livingston)
Pinconning (Bay)
Plainwell (Allegan)
Pleasant Lake (Jackson)
Pleasant Ridge (Oakland)
Plymouth (Wayne)
Pontiac (Oakland)
Portage (Kalamazoo)
Port Huron (St. Clair)
Portland (Ionia)
Potterville (Eaton)
Prudenville (Roscommon)
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Quincy (Branch)

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Reed City (Osceola)
Reese (Tuscola)
Remus (Mecosta)
Richland (Kalamazoo)
Richmond (Macomb)
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Roscommon (Roscommon)
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Saginaw (Saginaw)
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Saline (Washtenaw)
Sandusky (Sanilac)
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ALLEGAN

A PETER BRACHMAN JR MD
222 TROWBRIDGE ST
ALLEGAN MICH 49010

WALTER E CHASE MD
223 W BRIDGE
PLAINWELL MICHIGAN 49080

JAMES I CLARK MD
ROUTE 1 BOX 250
FENNVILLE MICH 49408

HARLAND C DANGLE MD
3650 LARCHMONT DR
ANN ARBOR MI 48105

G B GODDARD MD
218 E ORLEANS
OTSEGO MICH 49078

JAMES D HAYS MD
DOUGLAS MICHIGAN 49406

ELWIN B JOHNSON MD L
ROUTE 1
PULLMAN MI 49450

MARIETTA J KAYLOR MD
500 LINN ST
ALLEGAN MI 49010

VAN D KEELER MD
304 DIX ST
OTSEGO MI 49078

LAWRENCE LAGATUTTA MD
560 LINN ST
ALLEGAN MI 49010

JAMES E MAHAN MD L
402 TROWBRIDGE ST
ALLEGAN MICH 49010

KENNETH C MILLER MD
SAUGATUCK MI 49453

R L PLAGENHOFF MD
304 DIX ST
OTSEGO MI 49078

JANIS PONE MD
MARTIN MICH 49070

MICHAEL SYED QUADIR MD
P O BOX 326
FENNVILLE MI 49408

GLADWIN E RAMSEYER MD
125 E BRIDGE
PLAINWELL MICH 49080

HARRY E SCHNEITER MD
425 CUTLER ST
ALLEGAN MICH 49010

WILLIAM H SCHOCK MD
315 MAPLE ST
SAUGATUCK MICH 49453

ELWIN W TOPP MD
353 NAOMI ST
PLAINWELL MICHIGAN 49080

ORHAN A TUGRUL MD
425 CUTLER ST
ALLEGAN MI 49010

WILLARD R VAUGHAN MD L
PLAINWELL MI 49080

BERTHA C WISEMAN MD
R R #4 BOX 143
ALLEGAN MICH 49010

C R YANG MD
412 WATER ST
ALLEGAN MI 49010

ALPENA

PETER ALIFERIS MD
ALPENA GENERAL HOSP
ALPENA MICHIGAN 49707

SURINDAR S BEDI MD
FINCH CLINIC
ONAWAY MI 49765

JOHN W BUNTING MD R
P O BOX 542
ALPENA MI 49707

H J BURKHOLDER MD L
122 N SECOND AVE
ALPENA MICH 49707

STUART L COHN MD
1253 W WASHINGTON
ALPENA MICH 49707

AENEAS CONSTANTINE MD
HARRISVILLE MI 48740

THOMAS J COOK MD
312 E CHISHOLM ST
ALPENA MI 49707

CHARLES T EGLI MD
312 E CHISHOLM ST
ALPENA MI 49707

DONALD E FINCH MD
ONAWAY MI 49765

RICHARD FOLEY MD
ROGERS CITY MICH 49779

WILLIAM L FOX MD
601 W CHISHOLM ST
ALPENA MI 49707

JAMES GREENWOOD MD
115 N FIRST ST
ALPENA MI 49707

ALI GUNER MD
115 N FIRST AVE
ALPENA MI 49707

EDWARD A HIER MD
125 N SECOND AVE
ALPENA MICH 49707

WM F JACKSON MD
RFD 1 HURON SHORE DR
ROGERS CITY MI 49779

W F KUTSCHE MD
208 LAKE ST
OSCODA MICH 48753

W K LEHMANN MD
ALPENA GEN HOSP
ALPENA MI 49707

J M LEOPARD MD
312 E CHISHOLM
ALPENA MICH 49707

C L MCDOUGALL MD
601 W CHISHOLM ST
ALPENA MI 49707

WM E NESBITT MD
123 N 2ND AVE
ALPENA MICH 49707

F C D DELL JR MD
615 W CHISHOLM ST
ALPENA MICH 49707

BRUCE R OHMART MD
108 SO FIRST ST
ALPENA MI 49707

ELBERT S PARMENTER MD L
413 E FIRST ST
DIXON ILLINOIS 61021

ROBT C RIES MD
573 N BRADLEY HWY
ROGERS CITY MI 49779

JOHN L RIKER MD
601 N SECOND
ALPENA MICHIGAN 49707

PAUL A SCHOLTENS MD
ALPENA GEN HOSP
ALPENA MI 49707

JAMES E SPENS MD
123 N SECOND AVE
ALPENA MICH 49707

HENRY B STIBITZ MD
1065 US 23 NORTH
ALPENA MI 49707

DANA A TOMPKINS MD
POSEN MICH 49776

DARWIN E WAGONER MD
5007 N CEDAR LAKE RD
OSCODA MICHIGAN 48753

T M WATKINS MD
312 E CHISHOLM ST
ALPENA MICHIGAN 49707

T W WIENCZEWSKI MD
919 N 2ND AVE
ALPENA MICH 49707

CARLOS S WILLIS MD
113 STATE AVE
ALPENA MI 49707

RICHARD F WILLIS MD
312 E CHISHOLM
ALPENA MI 49707

CHAS S WILSON MD L
730 STATE AVE
ALPENA MICH 49707

BARRY

JAMES E ATKINSON MD
523 E CHARLES ST
HASTINGS MI 49058

WM D BAXTER MD
1005 W GREEN ST
HASTINGS MI 49058

LARRY BLAIR MD
1005 W GREEN
HASTINGS MI 49058

JACK A BROWN MD
535 FRANCIS
HASTINGS MI 49058

DOUGLAS H CASTLEMAN MD
607 N BROADWAY
HASTINGS MICHIGAN 49058

RAYMOND G FINNIE MD A
535 E FRANCIS
HASTINGS MICH 49058

ALEXANDER B GWINN MD L
860 OAK ST PO BOX 307
BALDWIN MI 49304

JOS D HEASLIP MD R
100 BLUFF VIEW DR
BELLEAIR BLUFFS FL 33540

R J HUEBNER MD
1005 W GREEN ST
HASTINGS MI 49058

STEWART LOFDAHL MD R
R 1 BOX 172
ST CHARLES IL 60174

WESLEY G LOGAN MD
1005 W GREEN ST
HASTINGS MICHIGAN 49058

CHARLES E MORRILL MD
1005 W GREEN ST
HASTINGS MI 49058

THOS W MYERS MD
307 N MAIN ST
NASHVILLE MICH 49073

ROBT B PRYOR MD
400 W STATE ST
HASTINGS MICHIGAN 49058

JAMES R SPINDLER MD
1005 W GREEN ST
HASTINGS MI 49058

JACK L TROMP MD
R D 3
LAKE ODESSA MICH 48849

BAY

KENT A ALCORN MD R
1420 CENTER AVE
BAY CITY MICH 48706

MARSHALL W ALCORN MD
1420 CENTER AVE
BAY CITY MICH 48706

ARTHUR D ALLEN MD L
101 W JOHN ST
BAY CITY MI 48706

ROBERT C ANTLE MD
101 W JOHN ST
BAY CITY MICHIGAN 48706

RICHARD B ASBURY M D
2110 16TH ST
BAY CITY MICHIGAN 48706

JUSTUS J AUSTIN MD R
2226 SHANNON WAY
MESA ARIZ 85201

RICHARD E BICKHAM MD
101 W JOHN ST
BAY CITY MI 48706

DAVID A BOWMAN MD
1815 WM H TAFT RD
CINCINNATI OHIO 45206

JIRI JOSEF BOZDECH MD
900 N JACKSON
BAY CITY MICH 48706

FREDERICK E BRENNER MD
900 N JACKSON
BAY CITY MI 48706

HARVEY H BRINKMAN MD
116 W STATE ST
EAST TAWAS MICH 48730

GEO M BROWN MD L
207 N WALNUT ST
BAY CITY MI 48706

GEORGE T BUECHLE MD
175 E PINCONNING RD
PINCONNING MI 48650

TOMAS R CAJIGAS MD
1908 COLUMBUS AVE
BAY CITY MI 48706

DONALD A CAMPBELL MD
700 BORTON
ESSEXVILLE MICHIGAN 48732

JOHN S CAMPBELL MD
2107 SIXTEENTH ST
BAY CITY MICH 48706

HUGH K COOK MD
101 W JOHN ST
BAY CITY MICH 48706

RAYMOND R COOK MD
1115 FIFTH STREET
BAY CITY MICHIGAN 48706

STANLEY A COSENS MD
101 W JOHN ST
BAY CITY MICH 48706

ROBT R CRISSEY MD
1405 CENTER AVE
BAY CITY MICH 48706

ROBT H CRISWELL MD L
3419 PORTAGE BLVD #43
FT WAYNE INDIANA 46804

NICHOLAS CSONKA MD
1308 COLUMBUS AVE
BAY CITY MICHIGAN 48706

MICHAEL J DARDAS MD
1413 CENTER AVE
BAY CITY MICHIGAN 48706

JAMES H DAVIS MD
1308 COLUMBUS
BAY CITY MICHIGAN 48706

MALCOLM K DOLBEE MD
BOX 518
STANDISH MICHIGAN 48658

JAMES L FENTON MD
701 N GRANT ST
BAY CITY MI 48706

ROBERT FERGUSON MD
101 W JOHN ST
BAY CITY MICHIGAN 48706

HANS FISCHER MD

STANDISH MICHIGAN 48658

WM M FOLLIS MD
101 W JOHN
BAY CITY MICH 48706

WM G GAMBLE JR MD L
2010 5TH AVE
BAY CITY MICH 48706

JOHN T GENECZKO MD
1308 COLUMBUS AVE
BAY CITY MICH 48706

JOHN W GRIGG MD
515 MULHOLLAND ST
BAY CITY MICHIGAN 48706

MONO GUERAMY MD
1411 CENTER AVE
BAY CITY MI 48706

ROBERT C HAFFORD MD
101 W JOHN ST
BAY CITY MICH 48706

GAYLAND L HAGELSHAW MD
101 W JOHN ST
BAY CITY MICH 48706

HAROLD H HEUSER MD
916 WASHINGTON AVE
BAY CITY MICH 48706

SAML F HOROWITZ MD
1415 CENTER AVE
BAY CITY MICH 48706

WALTER L HOWLAND MD
2110 E 16TH ST
BAY CITY MI 48706

MAURICE E HUNT MD
5000 MAPLE ST
FAIRGROVE MI 48733

J E JACQUES MD

TAWAS CITY MICHIGAN 48763

MARTIN D JAFFE MD
2110 16TH STREET
BAY CITY MICHIGAN 48706

RICHARD L JANKOWSKA MD
303 DAVIDSON BLDG
BAY CITY MI 48706

OTTO F JENS MD L
ROUTE #1
WHITTEMORE MI 48770

ORLEN J JOHNSON MD L
105 PARKWOOD
BAY CITY MI 48706

M CULVER JONES MD
900 N JACKSON
BAY CITY MICH 48706

TYRE K JONES III MD
1639 CARLA CT
ESSEXVILLE MI 48732

LARRY STANLEY KELLY MD

TAWAS CITY MICHIGAN 48763

SABINA KESSLER FRUX MD L
504 W MIDLAND ST
BAY CITY MI 48706

HOWARD T KNOBLOCH MD
1102 COLUMBUS
BAY CITY MICH 48706

MARTA SZEGO KOLTAY MD
3439 HIGHLAND WOODS
BAY CITY MI 48706

OSCAR P KOLTAY MD
3439 HIGHLAND WOODS
BAY CITY MI 48706

LASZLO KOVACSI MD
820 N JOHNSON
BAY CITY MICHIGAN 48706

EUGENE J KULINSKI MD
2110 16TH ST
BAY CITY MICHIGAN 48706

LESLIE A LAMBERT MD R
ROUTE #2
EAST TAWAS MICHIGAN 48730

JOHN L LANGIN MD
100 15TH ST
BAY CITY MICH 48706

JOHN A LEY MD
101 W JOHN ST
BAY CITY MI 48706

G B LOAN M D
ESSEXVILLE MDCL BLDG
ESSEXVILLE MI 48732

JOSEPH LOREE MD
2110 16TH ST
BAY CITY MICHIGAN 48706

JOHN C MAYNE M D
2108 16TH ST
BAY CITY MICH 48706

HARRY B MC GEE MD
101 W JOHN
BAY CITY MICHIGAN 48706

PETER L MC GEE M D
2110 16TH ST
BAY CITY MICH 48706

LEO B MC SHERRY JR MD
1308 COLUMBUS AVE
BAY CITY MICH 48706

ARLYN MOELLER MD
700 BORTON AVE
ESSEXVILLE MICHIGAN 48732

ALLEN B MOORE MD
1106 S MADISON ST
BAY CITY MI 48706

NEAL R MOORE MD
2138 FIFTH STREET
BAY CITY MICH 48706

DWIGHT J MOSIER MD
101 W JOHN ST
BAY CITY MICH 48706

SEZAI OLGAC MD
101 W JOHN ST
BAY CITY MI 48706

NORMAN P PAYEA MD
1198 COURT DRIVE
EAST TAWAS MI 48730

STANLEY M PEARSON MD
101 W JOHN ST
BAY CITY MICH 48706

B L PEDERSON MD
2108 16TH ST
BAY CITY MI 48706

WALTER E PELCZAR MD
1308 COLUMBUS AVE
BAY CITY MICH 48706

ROBT C PROPHATER MD
202 BOEHRINGER CT
BAY CITY MICHIGAN 48706

ALAN A REIDINGER MD M
4307 ELMWOOD
ROYAL OAK MI 48073

E H ROODA MD
101 W JOHN ST
BAY CITY MICH 48706

CHARLES S ROGERS MD
101 W JOHN ST
BAY CITY MICHIGAN 48706

PAUL W ROWE MD
MERCY HOSPITAL
BAY CITY MICHIGAN 48706

WM J SCHMELZER MD
602 MERCER ST PO 746
PINCONNING MICHIGAN 48650

HAROLD C SHAFER MD
101 W JOHN ST
BAY CITY MICH 48706

HUBERT L SHIELDS MD
101 W JOHN ST
BAY CITY MICH 48706

LIVIUS N STROIA MD
101 W JOHN ST
BAY CITY MICH 48706

R L SUTTON JR MD
116 W STATE ST
EAST TAWAS MICH 48730

ZIA E TAHERI MD
1411 CENTER AVENUE
BAY CITY MICHIGAN 48706

NASIT TANAL MD
101 W JOHN ST
BAY CITY MI 48706

CLYDE S TARTER MD R
ROUTE 5
ALPENA MI 49707

BERHAN I TOSUNER MD
1106 S MADISON
BAY CITY MI 48706

GAYLORD TREADWAY MD
900 N JACKSON
BAY CITY MICH 48706

HARRY F VAIL MD
564 W HAMPTON RD
ESSEXVILLE MI 48732

P VANASUPA MD
101 W JOHN ST
BAY CITY MICHIGAN 48706

JOHN H WAY MD
101 W JOHN ST
BAY CITY MI 48706

THOS G WILSON MD R
210 PHILADELPHIA CT
PALM HARBOR FL 33563

JOHN WINBURNE MD
101 W JOHN ST
BAY CITY MI 48706

HARRIS L WOODBURNE MD
1420 CENTER ST
BAY CITY MICH 48706

THOMAS B WRIGHT MD
101 W JOHN ST
BAY CITY MICH 48706

ALOIS L ZILIAK JR MD
3447 HIGHLAND WOODS
BAY CITY MICH 48706

BERRIEN

DEAN R ASSELIN MD
2817 S STATE ST
ST JOSEPH MICHIGAN 49085

ROBERT L ATKINSON MD
777-D RIVERVIEW DR
BENTON HARBOR MI 49022

RUDOLFO B BACOLOR MD
687 E EMPIRE AVE
BENTON HARBORN MI 49022

JOHN H BAILEY MD
2150 SAMUEL AVE
BENTON HARBOR MICH 49022

GERALD N BEAL MD
2817 S STATE ST
ST JOSEPH MICH 49085

WM H BENNER MD
960 AGARD ST LAB
BENTON HARBOR MI 49022

HECTOR BENSIMON MD
777-D RIVERVIEW DR
BENTON HARBOR MI 49022

IAM P BHISITKUL MD
1903 OAK ST
NILES MI 49120

DIXON L BIERI MD
645 RIVERVIEW DR
BENTON HARBOR MICH 49022

AUGUST F BLIESMER MD
505 PLEASANT ST
ST JOSEPH MICH 49085

WILLIAM C BOCK MD
645 RIVERVIEW DR
BENTON HARBOR MI 49022

CHARLES E BOONSTRA MD
MERCY HOSPITAL LAB
BENTON HARBOR MI 49022

JOHN W BRINK MD
807 MYRTLE ST
ST JOSEPH MI 49085

JACK BRONFENBRENNER MD
687 E EMPIRE AVE
BENTON HARBOR MICH 49022

JOHN R BRUNI M D
1 SOUTH FIFTH ST
NILES MICH 49120

FRANK H BUNKER MD
7770 RIVERVIEW DR #108
BENTON HARBOR MI 49022

HALE W CADIEUX MD
645 RIVERVIEW DR
BENTON HARBOR MICH 49022

DONALD C CAMP MD
8 N ST JOSEPH AVE
NILES MICH 49120

JOHN H CARTER MD
687 E EMPIRE AVENUE
BENTON HARBOR MICH 49022

HAROLD J CAWTHORNE MD R
R 4 BOX 201
COLOMA MI 49038

WM A CHICKERING MD
2016 LAKEVIEW
ST JOSEPH MI 49085

S G CILELLA M D
PAWATING HOSPITAL
NILES MICH 49120

JOS CONWAY MD
358 N MAIN
WATERVLIET MI 49098

ROBT C CONYBEARE MD
7770 RIVERVIEW DR
BENTON HARBOR MICH 49022

WELDON COOKE MD
BERRIEN GENERAL HOSP
BERRIEN CENTER MICH 49102

WM L COOPER MD
ROUTE 4 BOX 78
COLOMA MI 49038

RUSSELL T COSTELLO MD
645 RIVERVIEW DR
BENTON HARBOR MI 49022

WALTER S DAILEY MD
122 GRANT ST
NILES MICHIGAN 49120

ARCHIE J DALGLEISH MD
373 N MAIN ST
WATERVLIET MICH 49098

JOHN E DOOLITTLE MD
9 S ST JOSEPH AVENUE
NILES MICHIGAN 49120

HAZEL O EIDSON M D L
413 N BLUFF
BERRIEN SPRINGS MI 49103

RICHARD M ELGHAMMER MD
1850 COLFAX AVE
BENTON HARBOR MICH 49022

CLAYTON S EMERY MD L
1329 LAKE BLVD
ST JOSEPH MI 49085

WM K EMERY MD
1020 NILES AVE
ST JOSEPH MICH 49085

MICHAEL FABER MD
756 PIPESTONE ST
BENTON HARBOR MICH 49022

ROLANDO M FAJARDO MD
429 PAW PAW
COLOMA MI 49038

GROVER R FATTIC JR MD
61 N ST JOSEPH AVE
NILES MICHIGAN 49120

MARSHALL J FEELEY MD
2516 NILES AVE
ST JOSEPH MICH 49085

MORRIS E FRIEDMAN MD
115 N BARTON ST
NEW BUFFALO MI 49117

JAMES O GALLES MD
PAW PAW ISLAND
COLOMA MI 49038

SAMUEL H GOULD MD
1850 COLFAX AVE
BENTON HARBOR MICH 49022

BARBARA G GREEN MD
2600 MORTON STREET
ST JOSEPH MICH 49085

ROBT L GREEN MD
2600 MORTON STREET
ST JOSEPH MICH 49085

JAMES H GROVE MD
102 NO 4TH ST
NILES MI 49120

HAROLD M GRUNDSET MD
61 N ST JOSEPH AVE
NILES MICHIGAN 49120

RALPH O GUSTIN MD
PO BOX 159
BERRIEN SPRINGS MI 49103

HERALD A HABENICHT MD
ANDREWS UNIV MED CTR
BERRIEN SPRINGS MI 49103

ARTHUR S HAIGHT MD
645 RIVERVIEW DR
BENTON HARBOR MI 49022

O KENT HASSAN MD
802 E FRONT ST
BUCHANAN MICH 49107

EDWARD C HAUPT MD
7770 RIVERVIEW DR
BENTON HARBOR MICH 49022

FRED C HENDERSON MD
703 E MAIN
NILES MICH 49120

NOEL J HERSHEY MD
PO BOX 222
NILES MICH 49120

DAVID W HILLS MD
2821 STATE ST
ST JOSEPH MICHIGAN 49085

FRANK W HOWARD MD
756 PIPESTONE
BENTON HARBOR MICH 49022

DEAN HUDNUTT MD
807 MYRTLE ST
ST JOSEPH MI 49085

HAROLD O HUFF MD R
126-1/2 E MAIN ST
NILES MICH 49120

EDWIN R IRGENS MD
11 PEOPLES ST BK BLDG
ST JOSEPH MICH 49085

WADI J JIBRAIL MD
2912 S STATE ST
ST JOSEPH MI 49085

WM H JOHNSTON MD
715 MARKET ST
ST JOSEPH MICH 49085

HARVEY I KELSALL MD
1600 NILES AVE
ST JOSEPH MICH 49085

W J KENFIELD MD
P O BOX 6
ST JOSEPH MI 49085

F ALAN KENNEDY MD
315 FIDELITY BLDG
BENTON HARBOR MICH 49022

ORHAN KILIC MD
8 N ST JOSEPH ST
NILES MI 49120

FRANK A KING JR MD
858 PIPESTONE
BENTON HARBOR MICH 49022

HENRY J KLOS MD
777-D RIVERVIEW DR
BENTON HARBOR MI 49022

ROBT L LANDGRAF MD
PO BOX 222
NILES MICH 49120

K ROBERT LANG MD
ANDREWS UNIV MED CTR
BERRIEN SPRINGS MI 49103

DAVID W LEARNED MD
645 RIVERVIEW DR
BENTON HARBOR MICH 49022

BYUNG HOON LEE MD
925 PIPESTONE ST
BENTON HARBOR MI 49022

HAI SOON LEE MD
711 BEECHWOOD DRIVE
NILES MICHIGAN 49120

JOHN B LEVA MD
1122 SALEM AVE
BENTON HARBOR MICH 49022

FREDK H LINDENFELD MD
8 N ST JOSEPH AVE
NILES MICH 49120

RICHARD E LININGER MD
2712 HIGHLAND CT
ST JOSEPH MICH 49085

FRANK LINN MD
2522 NILES
ST JOSEPH MICH 49085

AQUILES G LIRA MD
PAWATING HOSP
NILES MI 49120

GENE E MADDOCK MD
MERCY HOSP X-RAY DEPT
BENTON HARBOR MI 49022

J T MC LELLAND MD
MERCY HOSP X RAY DEPT
BENTON HARBOR MICH 49022

STANLEY M MESIROW MD
7770 RIVERVIEW DR
BENTON HARBOR MICH 49022

T SCOTT MOORE MD
24 NO ST JOSEPH
NILES MICH 49120

CHAN NAMTZE MD
302 BROADWAY
NILES MICHIGAN 49120

JOHN J O TOOLE MD
133 E NAPIER
BENTON HARBOR MICH 49022

CHAS J OZERAN MD
127 E NAPIER
BENTON HARBOR MICH 49022

WM J PADELFORD MD
206 WHIPPLE BLVD
SOUTH LYON MI 48178

CHARLES E PAYNE MD
2724 NILES AVE
ST JOSEPH MI 49085

DAVID K PESHKA MD
61 N ST JOSEPH AVE
NILES MICHIGAN 49120

SANFORD POLANSKY MD
84 W MAIN ST
BENTON HARBOR MICH 49022

CHAS B PORTER MD
1589 COLFAX AVE
BENTON HARBOR MICH 49022

JOSEPH J RAMBO MD
555 LAKE ST
BRIDGMAN MICH 49106

DEAN K RAY MD
2522 NILES
ST JOSEPH MICH 49085

ROBT E REAGAN MD
232 WINDSOR
BENTON HARBOR MICH 49022

ALBERT RIZZO MD
2912 S STATE ST
ST JOSEPH MI 49085

J F GIRARD ROOKS MD
2611 NORTON
ST JOSEPH MI 49085

J GRISWOLD RUTH MD
1304 SENECA RD
BENTON HARBOR MI 49022

E O SILVERNALE MD
BERRIEN GEN HOSP
BERRIEN CENTER MI 49102

JAMES W SKINNER MD
460 RIDGEWAY ST
ST JOSEPH MICH 49085

W B SMITH MD
133 E NAPIER
BENTON HARBOR MICH 49022

MANUEL R SORI MD
7770 RIVERVIEW DR
BENTON HARBOR MICH 49022

JOHN W STRAYER MD
PO BOX 222
NILES MICH 49120

BURTON M SUTHERLAND MD
BERRIEN GEN HOSP
BERRIEN CENTER MI 49102

JOHN J TURNER MD
2817 S STATE ST
ST JOSEPH MICH 49085

MAURICE O URIST MD
454 PIPESTONE ST
BENTON HARBOR MICH 49022

JOHN A VALANTIEJUS MD
RR2 CEDAR LANE FARM
NEW BUFFALO MICH 49117

ANDRES H VASQUEZ MD
11 E MERCHANT
NEW BUFFALO MI 49117

RUSSELL J VASTINE JR
430 W CHICAGO
BUCHANAN MICHIGAN 49107

WAYNE L WERTZ MD
2522 NILES AVE
ST JOSEPH MI 49085

ROBERT W WESCHE MD
BERRIEN GENERAL HOSP
BERRIEN CENTER MI 49102

H O WESTERVELT MD L
539 PEARL ST
BENTON HARBOR MI 49022

DEAN WILLSON MD
7770 RIVERVIEW DR
BENTON HARBOR MICH 49022

CLINTON W WILSON MD
925 PIPESTONE ST
BENTON HARBOR MICH 49022

WARREN A WISE MD
7770 RIVERVIEW DR
BENTON HARBOR MI 49022

BRANCH

NAPIER S ALDRICH MD
162 MARSHALL ST
COLDWATER MICH 49036

CHARLES R BACON MD
300 E CHICAGO ST
COLDWATER MICH 49036

JAMES E BAILEY JR MD
300 E CHICAGO ST
COLDWATER MICH 49036

JAMES R BAKER MD
ROUTE 7 BOX 239B
COLDWATER MI 49036

DEAN T CULVER MD
173 E CHICAGO ST
COLDWATER MICH 49036

ROBT J FRASER MD
52 FAIRFIELD DR
COLDWATER MICH 49036

ORMOND O GEIB MD L
133 WALNUT BLVD
ROCHESTER MI 48063

JACK GIFT MD
274 E CHICAGO ST
COLDWATER MI 49036

HENRY C GOMLEY MD
108 E CHICAGO ST
BRONSON MICH 49028

JOHN C HEFFELFINGER MD
292 E CHICAGO AVE
COLDWATER MICH 49036

RONALD H HOEKSEMA MD
292 E CHICAGO ST
COLDWATER MICH 49036

ROBT M LEITCH MD
719 CAPITAL AVE SW
BATTLE CREEK MI 49015

RALPH W LENZ MD
235 E CHICAGO
COLDWATER MI 49036

HAROLD J MEIER MD L
87 W PEARL ST
COLDWATER MI 49036

HENRY R MOOI MD
292 E CHICAGO ST
COLDWATER MICH 49036

HARVEY L MOSS MD
47 CARLYLE
COLDWATER MICHIGAN 49036

WM E NETTLEMAN MD
87 W PEARL ST
COLDWATER MICHIGAN 49036

KENNETH L OLMSTED MD
675 MONROE
COLDWATER MICHIGAN 49036

VANGALA P REDDY MD
292 E CHICAGO ST
COLDWATER MI 49036

FREDERICK C REIGLE MD

LITCHFIELD MICHIGAN 49252

JOHN J RICK MD
61 E CHICAGO ST
COLDWATER MICHIGAN 49036

H K SCHILLINGER MD
300 BERKLEY
DEARBORN MI 48124

CARL A SHURTZ MD
56 BISHOP AVE
COLDWATER MI 49036

MALCOLM O STEIDER MD
ROUTE 7 BOX 24B
COLDWATER MI 49036

WILLIAM K STEWART MD
403 ANN ST
UNION CITY MICHIGAN 49094

JAMES A THOMAS MD L
1200 NO SHORE DR #108
ST PETERSBURG FL 33701

F P VALDERRAMA MD
235 E CHICAGO
COLDWATER MI 49036

NATHANIEL J WALTON MD
BOX 148
COLDWATER MICHIGAN 49036

CHIEH-CHENG WU MD
235 E CHICAGO ST
COLDWATER MI 49036

CALHOUN

MANUEL A AIRALA MD
1554 E MICHIGAN
ALBION MI 49224

MARTA S AIRALA MD
1554 E MICHIGAN AVE
ALBION MI 49224

ARNOLD A ALBRIGHT MD
R 1 BOX 300
BATTLE CREEK MI 49017

R H ALLEN M D
191 COLLEGE
BATTLE CREEK MICH 49017

NORMAN H AMOS MD R
ROUTE 1 BOX 450
AUGUSTA MI 49012

NORMAN O AMOS MD
710 NORTH AVENUE
BATTLE CREEK MI 49017

HAROLD E ANDERSON MD
131 E COLUMBIA AVE
BATTLE CREEK MI 49015

VICTOR AZUELA MD
124 LAKEVIEW AVE
BATTLE CREEK MI 49015

JAMES E BAKER MD A
VA HOSPITAL
BATTLE CREEK MI 49016

RICHARD L BAKKEN MD
200 COLLEGE ST
BATTLE CREEK MICH 49017

STUART P BARDEN MD
LEILA HOSP
BATTLE CREEK MICH 49014

ROY H BARIBEAU MD L
1003 CAPITAL AVE SW
BATTLE CREEK MI 49015

GEORGE H BARTELS MD
151 NORTH AVE
BATTLE CREEK MI 49017

JOHN BERGHORST MD A
89 S LAVISTA BLVD
BATTLE CREEK MI 49015

PHILIP P BONIFER JR MD
131 E COLUMBIA #213
BATTLE CREEK MI 49015

PHILIP P BONIFER MD
231 NORTH AVE
BATTLE CREEK MICH 49017

ROBT W BROWN MD
231 NORTH AVENUE
BATTLE CREEK MICH 49017

MARTIN F BUELL MD A
V A HOSPITAL
FT CUSTER MICHIGAN 49016

ALICE F CAMPBELL MD
103 E MULBERRY ST
ALBION MICH 49224

RICHARD J CAMPBELL MD R
BOX 158 CAPE HAZE
PLACIDA FL 33946

MARCELO CANLAS MD
LEILA HOSPITAL
9 EMMETT ST

BATTLE CREEK MI 49016

M J CAPRON JR MD
806 SECURITY BK BLDG
BATTLE CREEK MICH 49014

L HAROLD CAVINESS MD
185 N WASHINGTON
BATTLE CREEK MICH 49017

PAULINO CHAN MD
105 N JEFFERSON ST
MARSHALL MI 49068

EDWARD M CHANDLER MD
411 MICH NAT BK BLDG
BATTLE CREEK MICH 49014

CHARLES CHEN MD
167 COLLEGE
BATTLE CREEK MI 49017

WM R CHYNOWETH MD L
207 POST BLDG
BATTLE CREEK MICH 49017

JACK E COAKES MD A
716 GORHAM ST
MARSHALL MI 49068

GRAHAM F COLQUHOUN MD
188 COLLEGE ST
BATTLE CREEK MICH 49017

WILLIAM B COMAI MD
710 NORTH AVE
BATTLE CREEK MI 49017

RALPH A CRAM MD
500 S IONIA ST
ALBION MICH 49224

ROBT K CURRY MD

HOMER MI 49245

HAROLD L DALY JR MD
500 S IONIA ST
ALBION MICHIGAN 49224

MARY V DALY MD
201 RIVER ST
ALBION MI 49224

MIRIAM S DALY MD
500 S IONIA ST
ALBION MICH 49224

PAUL J DIAMANTE MD
710 NORTH AVENUE
BATTLE CREEK MICH 49017

M EKREM DIMBILOGLU MD
1018 NORTH AVE
BATTLE CREEK MI 49017

LIONEL E DORFMAN MD
1018 NORTH AVE
BATTLE CREEK MI 49017

ROBERT EDWARDS MD A
CHIEF OF STAFF
VA HOSPITAL

BATTLE CREEK MI 49016

STEPHEN FAIRBANKS MD R

WELLSTON MI 49689

F V FEATHERSTONE MD A
400 NORTH AVE
BATTLE CREEK MI 49017

PATRICK S FERAZZI M D
1018 NORTH AVE
BATTLE CREEK MICH 49017

FELIPE B FIGURACION MD
133 PLEASANT VIEW DR
BATTLE CREEK MI 49017

DUWARD L FINCH MD R
719 CAPITAL AVE S W
BATTLE CREEK MICH 49015

ROBT E FISHER MD
1501 W MICHIGAN AVE
BATTLE CREEK MICH 49017

ROBT H FRASER MD L
1112 SECURITY BK BLDG
BATTLE CREEK MI 49014

WM G FRITSCHEL MD
109 W ERIE ST
ALBION MI 49224

L D FUNK MD L
133 W BURR OAK
ATHENS MICHIGAN 49011

A M GIDDINGS MD L
BATTLE CREEK SAN
BATTLE CREEK MI 49017

E PAUL GIESER JR MD
188 COLLEGE
BATTLE CREEK MICH 49017

JOHN G GIRARDOT MD
713 CAPITAL AVE SW
BATTLE CREEK MICH 49015

PHILIP R GLOTFELTY MD
123 S JEFFERSON
MARSHALL MICHIGAN 49068

FRANKLIN L GRAUBNER MD
BOGAR THEATER BLDG
MARSHALL MICH 49068

J ALAN GRAY MD
309 MICH NATL BK BLDG
BATTLE CREEK MICH 49014

HAROLD E GREEN MD
P O BOX 1518
BATTLE CREEK MI 49016

JACK C GRIFFITH MD
616 MICH NAT BNK BLDG
BATTLE CREEK MICH 49014

MEHMET E HALAC MD
231 NORTH AVE
BATTLE CREEK MI 49017

ALFRED HAMADY MD
1018 NORTH AVE
BATTLE CREEK MICH 49017

ALFRED C HANSCOM MD
197 N WASHINGTON
BATTLE CREEK MI 49017

HARVEY C HANSEN MD
231 NORTH AVE
BATTLE CREEK MICH 49017

DONALD M HARRIS MD
517 E ROOSEVELT
BATTLE CREEK MI 49017

PHILIP M HENDERSON MD
109 W ERIE
ALBION MICH 49224

J D HENRIKSEN MD A
119 ST PETERS ALBANS
HERTS ENGLAND

MARJORIE J HICKMAN MD A
216 NORTH AVE
BATTLE CREEK MI 49017

C C HIGGINS MD
710 NORTH AVE
BATTLE CREEK MI 49017

GABRIEL D HOLLIS MD
124 LAKEVIEW AVE
BATTLE CREEK MI 49015

LEONARD R HOWARD MD
1506 SECURITY TOWER
BATTLE CREEK MI 49014

ARCHIE E HUMPHREY MD
122 N MADISON ST
MARSHALL MI 49068

ARTHUR A HUMPHREY MD
P O BOX 1518
BATTLE CREEK MICH 49016

HERBERT E HUMPHREY MD
122 N MADISON ST
MARSHALL MICHIGAN 49068

JOHN HUNTINGTON MD
710 NORTH AVE
BATTLE CREEK MICH 49017

ALI ISMAILOGLU MD
242 PARKSHORE DR
BATTLE CREEK MI 49017

DWIGHT JACOBSON MD
411 MICH NATL BANK
BATTLE CREEK MI 49014

JAMES R JEFFREY MD L
62 ANN AVE
BATTLE CREEK MI 49017

MELVIN JOHNSON JR MD
710 NORTH AVENUE
BATTLE CREEK MI 49017

AUBREY H JONES MD A
513 W MICHIGAN AVE
MARSHALL MI 49068

TYRE K JONES MD L
118 W GREEN
MARSHALL MICH 49068

GEO T KELLEHER MD
235 NORTH AVE
BATTLE CREEK MICH 49017

JAMES D KIESS MD
710 NORTH AVE
BATTLE CREEK MI 49017

MATTHEW R KINDE MD A
400 NORTH AVE
BATTLE CREEK MI 49016

PAUL C KINGSLEY MD
191 COLLEGE
BATTLE CREEK MICH 49017

EDWARD J KLOPP MD
173 COLLEGE ST
BATTLE CREEK MICH 49017

GORDON W LAKKE MD
151 NORTH AVE
BATTLE CREEK MI 49017

FRANCIS L LAM MD
408 CAPITAL AVE S W
BATTLE CREEK MICH 49015

VANCE B LANCASTER MD
710 NORTH AVE
BATTLE CREEK MI 49017

FRANK LANUTI MD
216 NORTH AVE
BATTLE CREEK MI 49017

JOS LEVY JR MD
231 NORTH AVE
BATTLE CREEK MICH 49017

WALTER B LONG MD

HOMER MICH 49245

KENNETH H LOWE MD R
141 PLEASANTVIEW
BATTLE CREEK MICH 49017

STANLEY T LOWE MD R
12 HIAWATHA DR
BATTLE CREEK MI 49015

C A E LUND MD L
226 DOGWOOD TRAIL
BATTLE CREEK MI 49017

JAMES J MAURER MD
616 MICH NATL BK BLDG
BATTLE CREEK MICH 49014

ALFRED G MC CUAIG MD
719 CAPITAL ST S W
BATTLE CREEK MICH 49015

JOHN W MCGEE MD
105 IRWIN AVE
ALBION MICHIGAN 49224

FREDK J MELGES MD
1506 SECURITY TOWER
BATTLE CREEK MICH 49014

HUGH K MOIR MD A
2731 W MICHIGAN
BATTLE CREEK MI 49017

DONALD B MORRISON MD R
719 CAPITAL ST S W
BATTLE CREEK MICH 49015

H F MULLENMEISTER MD
614 N E CAPITAL
BATTLE CREEK MICH 49017

CASMIR MURILLO MD
21136 WAUBASCON RD
BATTLE CREEK MI 49017

JULES L NETREBA MD
112 W MANSION
MARSHALL MI 49068

ANNE F NORGAN MD
131 E COLUMBIA #207
BATTLE CREEK MI 49015

SUSAN J PATRICK MD
181 LAKEWAY DRIVE
BATTLE CREEK MI 49017

ALBERT J PATT MD
154 WEST ST
BATTLE CREEK MI 49017

DONALD J PEARSON MD
255 NORTH AVE
BATTLE CREEK MICH 49017

CLARENCE T PIER MD A
P O BOX 1536
HOLMES BEACH FL 33509

LAWRENCE D PIPE MD
LEILA HOSPITAL
BATTLE CREEK MI 49014

C E POWELL MD
632 NORTH AVE
BATTLE CREEK MI 49017

DONNA POWELL MD A
V A HOSPITAL
FT CUSTER MI 49016

JOHN R POWER MD
154 WEST ST
BATTLE CREEK MICH 49017

ALVIN J RATZLAFF MD
197 N WASHINGTON
BATTLE CREEK MI 49017

F H REGUALDS JR MD
1331 W MICHIGAN AVE
BATTLE CREEK MI 49017

WILMA C W RORICH MD R
164 N DIVISION ST
BATTLE CREEK MI 49017

RUSSELL C ROWAN MD
500 S IONIA ST
ALBION MICHIGAN 49224

CLARK W ROYER MD R
10624 TROPICANA CIR
SUN CITY ARIZ 85351

CHAS J RYAN MD
LEILA HOSP
BATTLE CREEK MICH 49014

FREDERICK J SAWCHUK MD
191 COLLEGE ST
BATTLE CREEK MI 49017

CHARLES L SEIFERT MD
632 NORTH AVE
BATTLE CREEK MI 49017

PEDRO A SEVIDAL JR MD
1018 NORTH AVE
BATTLE CREEK MI 49017

H M SHELLENBERGER MD R
131 W HANOVER
MARSHALL MI 49068

A CLARK SIBILSKY MD A
281 HONEY LANE
BATTLE CREEK MI 49015

ROBT S SIMPSON MD
700 CAPITAL AVE SW
BATTLE CREEK MICH 49015

GEO W SLAGLE MD L
203 CAPITAL AVE NE
BATTLE CREEK MI 49017

RUSSELL T SMITH MD
7864 T DR NORTH
BATTLE CREEK MI 49017

COLLIS M SPENCER MD
308 1/2 S SUPERIOR ST
ALBION MICH 49224

WENDALL H STADLE MD R
607 JENNINGS LANDING
GOGUAC LAKE

BATTLE CREEK MI 49014

PETER J STEPHENS MD
175 COLLEGE ST
BATTLE CREEK MI 49017

C D STEPHENSON M D
154 WEST ST
BATTLE CREEK MICH 49017

RICHARD A STIEFEL MD L
260 WAHWAHTAYSEE WAY
BATTLE CREEK MICH 49015

FRANK J STROHMENGER MD
500 S IONIA ST
ALBION MICHIGAN 49224

CLIFFORD B TAYLOR MD
500 S IONIA ST
ALBION MI 49224

MYRON A TAZELAAR MD
219 N MADISON ST
MARSHALL MICH 49068

HARRY VANDER KAMP MD A
VA HOSPITAL
BATTLE CREEK MICH 49016

A GLENN VAN NOORD DDS A
131 E COLUMBIA AVE 210
BATTLE CREEK MI 49015

LLOYD E VERITY MD R
212 HOURGLASS WAY
SARASOTA FL 33581

GUNNAR VETNE MD
725 CAPITAL SW
BATTLE CREEK MICH 49015

CHAS S WALKER MD L
709 W VAN BUREN ST
BATTLE CREEK MICH 49017

JOHN F WALTERS MD
163 NORTH AVE
BATTLE CREEK MICH 49017

WM D WALTERS MD
P O BOX 1518
BATTLE CREEK MICH 49016

KEITH S WEMMER MD
1472 W MICHIGAN AVE
BATTLE CREEK MICH 49017

SHERWOOD B WINSLOW MD
710 NORTH AVE
BATTLE CREEK MICH 49017

S A YANNITELLI MD
710 NORTH AVE
BATTLE CREEK MI 49017

JOHN R YOUNG MD
719 CAPITAL AVE SW
BATTLE CREEK MICH 49015

MALCOLM C YOUNG MD
P O BOX 1518
BATTLE CREEK MI 49016

R B ZAPLITNY MD
1018 NORTH AVE
BATTLE CREEK MI 49017

SOPHIA ZAPLITNY MD A
1018 NORTH AVE
BATTLE CREEK MI 49017

BERTRAM ZHEUTLIN MD
50 ADAMS ST
BATTLE CREEK MI 49015

GEO A ZINDLER MD
1201 SECURITY BNK BLDG
BATTLE CREEK MICH 49014

CASS

URIAH M ADAMS MD
MARCELLUS MI 49067

RUDOLPH I CLARY MD R
204 JAMAICA WAY
PUNTA GORDA FL 33950

JUSTO DEVARONA MD
420 W HIGH ST
DOWAGIAC MI 49047

HENRY V GUZZO MD
515 MAIN ST SUITE 1
DOWAGIAC MI 49047

JOHN K HICKMAN MD R
P O BOX 226
DOWAGIAC MICH 49047

KENNETH C PIERCE MD
417 W HIGH ST
DOWAGIAC MICHIGAN 49047

LOWELL D SMITH MD
109 SCHOOL ST
CASSOPOLIS MI 49031

AARON K WARREN MD
109 SCHOOL ST
CASSOPOLIS MICHIGAN 49031

MOHAMMED ZAMAN MD
515 MAIN ST #3
DOWAGIAC MI 49047

CHIPPEWA

HUGH R ALLOTT MD
816 ASHMUN ST
SAULT STE MARIE MICH 49783

H MILTON BLAIR MD
300 COURT ST
SAULT STE MARIE MICH 49783

CLAIRE H CLAUSEN MD L
1110 LUCERNE AVE
CAPE CORAL FL 33904

WM J COULTER MD
DRUMMOND ISLAND MI 49726

DONALD O FINLAYSON MD
301 E SPRUCE ST
SAULT STE MARIE MI 49783

MARIE A HAGELE MD
126 PARK PL
SAULT STE MARIE MI 49783

HERBERT E HAMEL MD
220 BURDETTE ST
ST IGNACE MI 49781

ROBERT O HEILMAN MD
WAR MEMORIAL HOSP
SAULT STE MARIE MI 49783

DONNELL C HOWE JR MD
300 COURT ST
SAULT STE MARIE MICH 49783

THOS B MACKIE MD
300 COURT ST
SAULT STE MARIE MICH 49783

WM F MERTAUGH MD
104 W SPRUCE ST
SAULT STE MARIE MICH 49783

BENJ T MONTGOMERY MD L
P O BOX 39
SAULT STE MARIE MI 49783

EARL S RHINO MD
SAULT POLYCLINIC
SAULT STE MARIE MICH 49783

DALE SCOTT MD
816 ASHMUN ST
SAULT STE MARIE MICH 49783

THOMAS SLOUGH MD
301 E SPRUCE ST
SAULT STE MARIE MI 49783

CHAS F THOMPSON MD L
DRUMMOND ISLAND MI 49726

TONY J TRAPASSO MD
816 ASHMUN
SAULT STE MARIE MICH 49783

ANTON G VENIER MD
816 ASHMUN ST
SAULT STE MARIE MI 49783

ERLING S WEDDING MD
203 HUDSON DR
SAULT STE MARIE MI 49783

CLINTON

GEO W BENNETT MD
203 W MAIN ST
ELSIE MI 48831

BRUNO C COOK MD
WESTPHALIA MI 48894

JAMES M GROST MD
PARK AVENUE
ST JOHNS MI 48879

SHERWOOD R RUSSELL MD
210 E WALKER ST
ST JOHNS MI 48879

VICTOR L SHELINE MD
MEDICAL CENTER
ITHACA MICH 48847

EARL M SLAGH MD
ELSIE MI 48831

WESLEY F STEPHENSON MD
510 E WALKER ST
ST JOHNS MICH 48879

DELTA

FRANCIS C ANDERSON MD
218 S 10TH ST
ESCANABA MICH 49829

THEODORE L BASH MD
BARK RIVER MICHIGAN 49807

ROLAND E BERRY MD
ST FRANCIS HOSP
ESCANABA MI 49829

MARY CRETENS MD DIR
DELTA-MENOM HLTH DEPT
DELTA COUNTY BLDG
ESCANABA MI 49829

JAMES R DEHLIN MD
8 S 11TH ST
GLADSTONE MI 49837

DONALD N FITCH MD
DOCTORS PARK
ESCANABA MI 49829

JAMES H FYVIE MD
202 S CEDAR ST
MANISTIQUE MI 49854

E JAMES GORDON MD
DEER PARK
ESCANABA MI 49829

LOUIS P GROOS MD
1015 S 1ST AVE
ESCANABA MICH 49829

RAYMOND L HOCKSTAD MD
DOCTORS PARK
ESCANABA MI 49829

OTTO S HULT MD
1005 DELTA AVE
GLADSTONE MICH 49837

JOHN LE MIRE MD
DOCTORS PARK
ESCANABA MI 49829

WM A LE MIRE III MD
DOCTORS PARK
ESCANABA MI 49829

WILLIAM A LE MIRE MD
DOCTORS PARK
ESCANABA MICH 49829

GEO MANIACI MD
8 SOUTH 11TH ST
GLADSTONE MICH 49837

THOS A MC INERNEY MD
1221 LUDINGTON ST
ESCANABA MICH 49829

CARL J OLSON MD
8 S 11TH ST
GLADSTONE MICH 49837

HOWARD J PARKHURST MD H
1551 DOUSMAN ST
GREEN BAY WISC 54303

A LESLIE ROSE MD
DOCTORS PARK
ESCANABA MI 49829

ROBT E RYDE MD
1221 LUDINGTON
ESCANABA MICH 49829

LAWRENCE SELL JR MD
MANISTIQUE CLINIC
MANISTIQUE MI 49854

NIKOLAUS J THEISEN MD
1400 16TH AVENUE S
ESCANABA MI 49829

DUANE L WATERS MD
200 S CEDAR ST
MANISTIQUE MICH 49854

MERLE E WEHNER MD
131 RIVER ST
MANISTIQUE MICH 49854

DICKINSON

EARL R ADDISON MD
412 SUPERIOR AVE
CRYSTAL FALLS MICH 49920

WM H ALEXANDER MD L
411 EAST C ST
IRON MOUNTAIN MI 49801

DONALD T ANDERSON MD
408 HAMILTON AVE
KINGSFORD MICH 49801

ROBERT ANDERSON MD
DICKINSON MEM CO HOSP
IRON MOUNTAIN MI 49801

GEORGE H BOYCE JR MD A
VA HOSPITAL
IRON MOUNTAIN MI 49801

ROBERT CALDERWOOD DDS A
1ST NATL BANK BLDG
IRON MOUNTAIN MI 49801

RALPH E CARLSON MD
500 STEPHENSON AVE
IRON MOUNTAIN MICH 49801

R D CECCONI M D
COMMERCIAL BANK BLDG
IRON MOUNTAIN MICH 49801

JOYCE GENDZWELL MD
805 VULCAN STREET
IRON MOUNTAIN MICH 49801

WM R GLADSTONE JR MD
804 MAIN ST
NORWAY MI 49870

WILLARD N HAYES MD
720 N MAIN ST
NORWAY MICH 49870

WILLIS H HURON MD
106 WEST B ST
IRON MOUNTAIN MICH 49801

LIONEL E IRVINE MD L
BOX 312
IRON RIVER MI 49935

DONALD J JACOBS MD
PROFESSIONAL BLDG
IRON MOUNTAIN MICH 49801

HUGH D MC EACHRAN MD
500 STEPHENSON AVE
IRON MOUNTAIN MICH 49801

JOHN A NEWKIRK MD
PROFESSIONAL GROVE
IRON MOUNTAIN MI 49801

ERNEST PIEPER MD
1517 S STEVENSON
IRON MOUNTAIN MICH 49801

RUSSELL C RETALLACK MD
326 W GENESEE ST
IRON RIVER MICH 49935

WARREN J ROBERTS MD A
VA HOSPITAL
IRON MOUNTAIN MI 49801

WALTER A SCHMUTZLER MD
373 WOODWARD ST
IRON MOUNTAIN MICH 49801

JOHN M SCHROEDER MD
212 EAST B ST
IRON MOUNTAIN MICH 49801

DOUGLAS SHERK MD
412 SUPERIOR
CRYSTAL FALLS MICH 49920

DONALD R SMITH MD
BOX 471
IRON MOUNTAIN MICH 49801

LOWELL SOMERS MD
BOX 98
FLORENCE WISCONSIN 54121

CHAS G STEINKE MD
517 STEPHENSON AVE
IRON MOUNTAIN MICH 49801

ROBERT E STELLE MD
701 STATE
CRYSTAL FALLS MI 49920

PAUL L TRUMP MD
COMMERCIAL BANK BLDG
IRON MOUNTAIN MI 49801

ARNOLD WOLLUM MD A
R 1
VULCAN MI 49892

EATON

RICHARD H BERG MD
162 SECOND ST
SUNFIELD MI 48890

B PHILLIP BROWN MD
541 LANSING ST APT 6
CHARLOTTE MI 48813

KEITH L CURTIS MD
202 S COCHRAN
CHARLOTTE MICHIGAN 48813

C LE ROY DE LAND MD
121 S MAIN
OLIVET MI 49076

PAUL H ENGLE MD A
COLONIAL APARTMENTS
OLIVET MI 49076

D STEWART ERHARD MD
301 RANCHO
EATON RAPIDS MICH 48827

FRED C GARLOCK MD
406 E JEFFERSON ST
GRAND LEDGE MICH 48837

GORDON R HARROD MD
11653 S HARTEL RD
GRAND LEDGE MI 48837

DANIEL D JOSEPH MD
202 S COCHRAN
CHARLOTTE MICHIGAN 48813

ROBERT L LEESER MD
202 S COCHRAN
CHARLOTTE MI 48813

ALBERT H MEINKE JR MD
800 CUMBERLAND DR
EATON RAPIDS MICH 48827

ALBERT W MYERS MD

POTTERVILLE MI 48876

S R ROBINSON MD
11653 S HARTEL RD
GRAND LEDGE MICH 48837

LESTER G SEVENER MD
236 S MAIN ST
CHARLOTTE MICH 48813

EBER B SHERMAN MD
501 CARLISLE ST
EATON RAPIDS MI 48827

HERMAN F VAN ARK MD
410 BLAKE ST
EATON RAPIDS MI 48827

CLAYTON D WILLITS MD
R R #1
NASHVILLE MI 49073

GENESEE

R RODERICK ABBOTT MD
420 S BALLENGER HWY
FLINT MI 48504

ALBERT C ADAMS MD
5210 LAPEER RD
FLINT MI 48503

BURNELL H ADAMS MD
609 S LYNCH ST
FLINT MI 48503

LEROI J ALEXANDER MD
915 W PASADENA
FLINT MI 48504

DONALD J ALLCORN MD
1279 COLDWATER RD
FLINT MI 48505

HARLEY H ANDERSON MD
11820 N SAGINAW
MT MORRIS MICH 48458

JOHN L ANDERSON MD
2765 FLUSHING RD
FLINT MI 48504

RICHARD A ANTELL MD
3402 SANTA CLARA CT
FLINT MICHIGAN 48504

GEO E R ANTHONY MD R
RR1 PORT LAMBTON
ONTARIO CANADA

ROBERT M ARMBRUSTER MD
626 MOTT FDTN BLDG
FLINT MI 48502

DUANE J BAILEY MD
238 W CAROLINE ST
FENTON MI 48430

W CLAIRE BAIRD MD
2765 FLUSHING RD
FLINT MICHIGAN 48504

DAVID A BARBOUR MD
5369 BRIARCREST
FLINT MICHIGAN 48504

FLEMING A BARBOUR MD
2015 LINCOLN DR
FLINT MI 48503

FRANKLIN W BASKE MD L
923 MAXINE ST
FLINT MI 48503

JOSEPH T BATDORF MD
8483 HOLLY RD
GRAND BLANC MI 48439

LAWRENCE G BATEMAN MD
1928 LEWIS ST
FLINT MI 48506

MARTIN L BEARD MD
6606 N SAGINAW ST
FLINT MI 48505

DOUGLASS R BECK MD
5445 FERNWOOD DR
FLINT MI 48504

EUGENE B BECKER MD
2849 MILLER RD
FLINT MI 48503

I TURAN BENGISU MD
1615 GENESEE TOWERS
FLINT MI 48502

JACK BENKERT MD
6384 KINGS POINTE
GRAND BLANC MICH 48439

JOHN C BENSON MD
639 MOTT FDTN BLDG
FLINT MI 48502

HARRY BERMAN MD
3309 FENTON RD
FLINT MI 48507

GERALD P BERNER MD
2765 FLUSHING RD
FLINT MICHIGAN 48504

ELI N BERNSTEIN MD
1201 FLUSHING RD
FLINT MICHIGAN 48504

J A BEST M D
3801 CLIO RD
FLINT MI 48504

GEO D BEYER MD
G 3337 W VIENNA
CLIO MICHIGAN 48420

GREGOIRE BOLDUC MD
325 E FIRST ST
FLINT MICHIGAN 48502

WM P BOLES MD L
714 BEACH ST
FLINT MI 48502

VIRGILIO BONET MD
2765 FLUSHING RD
FLINT MI 48504

DONALD BOSKER MD
1818 LONGWAY BLVD #302
FLINT MI 48506

ROBERT A BOTA MD
1623 MONTCLAIR
FLINT MICHIGAN 48503

PETER R BOYER MD
2510 NERREDIA #103
FLINT MI 48504

ROBT M BRADLEY MD
1112 MOTT FND BLDG
FLINT MI 48502

JOHN L BRADY MD
302 KENSINGTON
FLINT MI 48502

ROY G BRAIN MD L
460 S SAGINAW ST
FLINT MI 48502

HIRA E BRANCH MD
817 MOTT FDTN BLDG
FLINT MICHIGAN 48502

DONALD R BRASIE MD R
R 2 BOX 436
ROSCOMMON MI 48653

GUY D BRIGGS MD L
224 E COURT ST
FLINT MI 48503

CLARENCE A BROWN MD
2765 FLUSHING RD
FLINT MI 48504

HOWARD C BRUCKNER MD
109 FAIRMOUNT AVE
CHATHAM N J 07928

DONALD R BRYANT MD
621 MOTT FDN BLDG
FLINT MICHIGAN 48502

GERALD S BUCHANAN MD
3471 GRANGE HALL RD
HOLLY MICH 48442

WM F BUCHANAN MD
238 W CAROLINE
FENTON MICH 48430

LESLIE V BURKETT MD L
618 DOUGHERTY PL
FLINT MI 48504

DONALD R CANADA MD
1207 N BALLENGER HWY
FLINT MI 48504

NORMAN A CARTER MD
1201 FLUSHING RD
FLINT MI 48504

MYRTON S CHAMBERS MD L
3402 WESTWOOD PKWY
FLINT MI 48503

EUGENE N CHARDOUL MD
202 PATERSON BLDG
FLINT MI 48502

WM D CHASE MD L
1190 RIV VALLEY DR #5
FLINT MI 48504

RONALD CHEN MD
432 N SAGINAW
FLINT MI 48502

MINOO B CHINOY MD
325 E FIRST ST
FLINT MI 48502

JOHN C CHOGICH MD
1245 DUPONT ST
FLINT MI 48504

ROBT L CLARK MD
1301 FLUSHING RD
FLINT MI 48504

GERALD G COLE MD
1818 LONGWAY BLVD
FLINT MI 48501

JAMES I COLLINS MD
G 1128 N DYE ROAD
FLINT MICHIGAN 48504

CLIFFORD W COLWELL MD
328 S SAGINAW ST
FLINT MI 48502

DAVID E CONGDON MD
9190 PINE BLUFF
FLUSHING MI 48433

MCCLELLAN B CONOVER MD
1209 KENSINGTON AVE
FLINT MI 48503

FRANK W COOK MD
410 S BALLENGER
FLINT MICHIGAN 48504

JOHN L COOK MD
GENESEE BANK BLDG #208
FLINT MI 48502

CORY E COOKINGHAM MD
214 MEDICAL ARTS BLDG
FLINT MICHIGAN 48501

LOUIS B CORIASSO MD
9224 HAPPY HOLLOW CT
GRAND BLANC MI 48439

KENNETH M COYNE MD
325 E FIRST ST
FLINT MICHIGAN 48503

ROBERT L CROSS MD
5221 WOODHAVEN DR
FLINT MICHIGAN 48504

G CAMPBELL CUTLER M D
420 S BALLENGER
FLINT MI 48504

JOHN R DAMM MD
8483 HOLLY RD
GRAND BLANC MI 48439

ROBT C DAVIS MD
G 3029 FLUSHING RD
FLINT MI 48504

RALPH E DAWSON MD
721 W SIXTH AVE
FLINT MI 48503

JOHN MURRAY DAY MD
1919 GENESEE TOWERS
FLINT MI 48502

NICHOLAS DELZINGRO MD L
328 N MAIN ST
DAVISON MI 48423

CARLTON K DETTMAN MD
10512 MCKINLEY RD
MONTROSE MICH 48457

BERNARD DICKSTEIN MD
605 NATIONAL BLDG
FLINT MI 48502

ROY D DIGGS JR MD
4250 N SAGINAW ST
FLINT MI 48505

SAMUEL R DISMOND MD
1402 S SAGINAW ST
FLINT MICHIGAN 48503

MAX E DODDS MD
625 S GRAND TRAVERSE
FLINT MICHIGAN 48503

JAMES F DOOLEY MD
3210 S DORT HWY
FLINT MI 48507

WILLIAM F DWYER MD
625 S GRAND TRAVERSE
FLINT MICHIGAN 48503

RICHARD A DYKEWICZ MD
2744 FLUSHING RD
FLINT MI 48504

WAYNE L EATON MD
1703 CRESCENT DR
FLINT MI 48503

ERNEST M EICHHORN MD
2765 FLUSHING RD
FLINT MI 48504

THOS N EICKHORST MD
2765 FLUSHING RD
FLINT MI 48504

DOUGLAS D EITZMAN MD
2765 FLUSHING RD #302
FLINT MI 48504

MEHMET EKINCI MD
2279 GRAND BLANC RD
GRAND BLANC MI 48439

HARDIE B ELLIOTT MD
503 S SAGINAW ST
FLINT MI 48502

RAYMOND M ENGELMAN MD
808 N GRAND TRAVERSE
FLINT MI 48503

ALI A ESFAHANI MD
710 MOTT FDTN BLDG
FLINT MI 48502

RALPH D ETTINGER MD
238 W CAROLINE ST
FENTON MICHIGAN 48430

JOHN F FAILING JR MD
HURLEY HOSPITAL
FLINT MICHIGAN 48502

Q C FAN MD
2002 E COURT ST
FLINT MICH 48503

BEN S FARAH MD
2765 FLUSHING RD
FLINT MI 48504

MAYNARD M FARHAT MD
505 W COURT ST
FLINT MICH 48503

CYRUS FARREHI MD
302 KENSINGTON
FLINT MI 48503

MANSON G FEE MD
108 E KEARSLEY ST
FLINT MI 48502

JOSE A FERNANDEZ MD
2510 NERREDIA
FLINT MI 48504

JAMES W FERRIS MD
1005 LEITH ST
FLINT MI 48505

THEO FINKELSTEIN MD
1415 BROADWAY BLVD
FLINT MI 48506

RICHARD D FLETT MD
1368 KRA-NUR DR
DAVISON MI 48423

GRAYDON R FORRER MD
2279 E GRAND BLANC RD
GRAND BLANC MICH 48439

LEON FRIEDMAN MD
2765 FLUSHING RD
FLINT MI 48504

HARVEY T FULLER MD R
2700 N HAYDEN RD
SCOTTSDALE ARIZ 85257

ALBERT J GASIS MD
1201 FLUSHING RD
FLINT MI 48504

SABAH K GEORGE MD
721 W 6TH AVE
FLINT MI 48503

GEORGE Z GERRAS MD
1334 N DYE ROAD
FLINT MICHIGAN 48504

JAMES J GIBBONS MD
101 MEDICAL ARTS BLDG
FLINT MI 48501

RUDOLPH GOETZ MD
1221 CHURCH STREET
FLINT MICHIGAN 48503

E MARSHALL GOLDBERG MD
HURLEY HOSPITAL
FLINT MI 48502

EVELYN GOLDEN MD
218 E COURT ST
FLINT MICH 48503

H MAXWELL GOLDEN MD
218 E COURT ST
FLINT MI 48503

SAUL S GORNE MD
619 CLIFFORD ST
FLINT MI 48503

GEO H GREIDINGER MD
ST JOSEPH HOSPITAL
FLINT MI 48502

ERNEST P GRIFFIN JR MD
1505 ARROW LANE
FLINT MI 48507

JACK R GROMMONS MD
721 W SIXTH AVE
FLINT MICHIGAN 48503

HAROLD F GROVER MD L
3433 FENTON RD
FLINT MI 48507

GURDON S GUILE MD A
1621 DUPONT ST
FLINT MI 48504

EDWIN H GULLEKSON MD
2765 FLUSHING RD
FLINT MI 48504

C R GUMPPER MD
4437 MORRISH RD
SWARTZ CREEK MICH 48473

GEO L GUNDRY MD L
8030 GREEN VALLEY DR
GRAND BLANC MI 48439

ISADORE H GUTOW MD
2765 FLUSHING RD
FLINT MI 48504

JULIUS J GUTOW MD
726 CHURCH STREET
FLINT MICHIGAN 48503

ERWIN GUTOWITZ MD
420 S BALLENGER HWY
FLINT MICHIGAN 48504

RICHARD D HACKLEY MD
1818 R T LONGWAY BLVD
FLINT MI 48501

ROBT F HAGUE MD L
2745 LAKEWOOD DR
FLINT MI 48507

JOHN WM HALLITT MD
102 MEDICAL ARTS BLDG
FLINT MI 48501

ROBT H HARPER MD
713 THOMSON ST
FLINT MI 48503

BERNARD J HARRIS MD
1750 LYNBROOK
FLINT MICHIGAN 48507

DONALD R HARRIS MD
2429 WELCH BLVD
FLINT MICHIGAN 48504

FREDK V HAUSER MD
1015 MOTT FNDN BLDG
FLINT MI 48502

JAMES E HAWKINS MD
4618 ROBERTS ST
FLINT MI 48501

PHYLLIS D HELCHER MD
420 S BALLENGER
FLINT MI 48504

ROBERT D HELFERTY MD
1116 ANN ARBOR STREET
FLINT MI 48503

FREDRIC A HELMER MD
2765 FLUSHING RD #315
FLINT MI 48504

CHARLES R HENNESSY MD
917 MOTT FNDN BLDG
FLINT MICH 48502

HAROLD H HISCOCK MD L
1315 MOTT FDTN BLDG
FLINT MI 48502

THOMAS A HOCKMAN MD
11125 OLD BRIDGE RD
GRAND BLANC MICHIGAN 48439

FRANK V HODGES MD
HURLEY HOSPITAL
FLINT MI 48502

VIRGIL R HOOPER MD
4230 TRUMBULL
FLINT MICHIGAN 48504

ROBERT J HOUSE MD
915 S GRAND TRAVERSE
FLINT MICHIGAN 48503

WM C HUBBARD MD
302 PATERSON BUILDING
FLINT MICHIGAN 48502

WILFRID L HUFTON MD
2765 FLUSHING RD
FLINT MI 48504

RICHARD J HUNT MD
2025 CRESTBROOK LN
FLINT MI 48507

CLAYTON E HURD MD
205 LINCOLN ST
FENTON MICHIGAN 48430

LAWRENCE R IRISH MD
6146 SIERRA PASS
FLINT MICHIGAN 48504

ORESTES IUNG MD
2710 W COURT ST
FLINT MI 48503

ROBT E JAMES MD
1860 HAMPDEN
FLINT MI 48507

WALTER H JANKE MD
710 MOTT FNDTN BLDG
FLINT MI 48502

A H JOHNSON JR MD R
429 NORTH ST SW #506
WASHINGTON D C 20024

RAYMOND E JOHNSON MD
5173 W REID RD
SWARTZ CREEK MICH 48473

ALVIN E JUDD MD
1620 N FRANKLIN
FLINT MI 48506

TAI K KANG MD
432 N SAGINAW ST #707
FLINT MI 48502

PAUL H KARR MD
1818 R T LONGWAY BLVD
FLINT MICHIGAN 48503

LEWIS D KAUFMAN MD
4002 N SAGINAW ST
FLINT MI 48505

JAMES E KELLY MD
2765 FLUSHING RD
FLINT MICHIGAN 48504

DONALD M KENNETT MD
315 BELLA VISTA DR
GRAND BLANC MICHIGAN 48439

C B KIMBROUGH MD
1402 S SAGINAW ST
FLINT MI 48503

O F KLINE MD
2765 FLUSHING RO
FLINT MI 48504

JAMES G KNAGGS MD
500 S GR TRAVERSE ST
FLINT MI 48503

WM D KNAPP MD
503 S SAGINAW ST
FLINT MI 48502

CHESTER S KOOP MD
1 SAC ST
FRANKFORT MI 49635

ARTHUR H KRETCHMAR MO L
481 ST ANDREWS OR
APTOS CALIF 95003

CARROLL J LA VIELLE MD
1135 N OYE RO
FLINT MI 48504

J LEONIDAS LEACH MD L
5014 N SAGINAW ST
FLINT MI 48505

LESLIE L LE MIEUX MO
701 W OAYTON ST
FLINT MI 48504

MARK C LEVINE MD
G3083 FLUSHING RO
FLINT MI 48504

BILLIE LEWIS MD
739 MOTT FON BLOG
FLINT MICHIGAN 48502

JOHNNY F LEWIS MO A
1318 W GENESEE ST
FLINT MI 48504

THOS E LEWIS MO
4071 RICHFIELD RD
FLINT MICHIGAN 48506

VIVIAN M LEWIS MD
1618 KENSINGTON
FLINT MICHIGAN 48503

ROBT W LIEBER MO
6144 PEBBLESHIRE CIRC
FLINT MICHIGAN 48507

ARTHUR S LIGHTFOOT MO
4500 OETROIT ST
FLINT MICHIGAN 48505

FREDERICK S LIM MD
806 W SIXTH AVE
FLINT MI 48503

OAVID R LIMBACH MD
900 BEGOLE ST
FLINT MI 48503

THOMAS C LINOMAN M O
2484 NOLEN OR
FLINT MICH 48504

ERNESTO O LIS MD
703 E COURT ST
FLINT MI 48503

JACKSON E LIVESAY MO L
503 S SAGINAW ST
FLINT MI 48502

E R LUMAQUE MO
6474 KINGS PTE RO
GRAND BLANC MI 48439

ROSIE M LUMAQUE MO
6474 KINGS PTE RO
GRAND BLANC MI 48439

RICHARO M LUNDEEN MO
3393 CLIO
FLINT MICH 48504

JOHN A LUSK MD
9233 W OAVISON RO
OAVISON MICHIGAN 48423

SYDNEY N LYTTLE MD
1207 N BALLENGER HWY
FLINT MI 48504

J W MAC KENZIE JR MO
4437 MORRISH RD
SWARTZ CREEK MICH 48473

ALBERT J MACKSOOD MD
3169 W PIERSON RD
FLINT MICHIGAN 48504

JOHN M MACKSOOD MO
3169 W PIERSON RD
FLINT MI 48504

JOS A MACKSODO MD L
3169 W PIERSON RO
FLINT MI 48504

WILLIAM E MACKSODO MD
3169 W PIERSON RD
FLINT MICHIGAN 48504

ALBERT A MACPHAIL MD
3302 HAWTHORNE OR
FLINT MICHIGAN 48503

C H MANGELSDORF MD
G3393 CLIO RO
FLINT MICHIGAN 48504

JOHN T MANWARING MD
G5432 CALKINS RD
FLINT MI 48504

RUBEN J MARCHISANO MD
3507 SUNSET ORIVE
FLINT MI 48503

PAUL J MARKUNAS MO
4002 N SAGINAW ST
FLINT MICH 48505

JAMES A MARTIN MD
812 S ADELAIDE ST
FENTON MICH 48430

HELID B F MARTINS MD
1179 N BALLENGER
FLINT MI 48504

BERTON J MATHIAS MO
1301 FLUSHING RD
FLINT MI 48504

J D MC ALINDON MD
1423 DX YOKE DR
FLINT MICHIGAN 48504

JUNIUS W MC CLELLAN MD
BUICK MOTOR DIVISION
FLINT MI 48505

EARL J MCGARVAH MD
410 S BALLENGER HWY
FLINT MI 48504

JOHN D MCGRAE JR MD
2433 WELCH BLVO
FLINT MICHIGAN 48504

ALLAN R MCGREGOR MD
G 3337 W VIENNA RO
CLIO MICHIGAN 48420

THOMAS A MC LENNAN MO
913 MOTT FNDTN BLOG
FLINT MI 48502

KENNETH W A MC LEOO MD
6078 WINGED FOOT OR
GRAND BLANC MI 48439

RICHARO J MC MURRAY MD
2765 FLUSHING RO
FLINT MICH 48504

O W MCNAUGHTON MO
2437 PINEWOOD CT
FLUSHING MI 48433

OAVID MC TAGGART M O
625 S GRAND TRAVERSE
FLINT MICHIGAN 48503

H H MENDREK MO
2765 FLUSHING RO
FLINT MI 48504

ROBT M MICHELS MD
2702 FLUSHING RD
FLINT MICHIGAN 48504

RICHARO B MICHELSON MD
2014 ROBT T LONGWAY
FLINT MI 48503

KURT W MIKAT MD
6061 ROLLING GREEN OR
GRAND BLANC MI 48439

LOREN E MILLER MD
2645 CORUNNA RD
FLINT MI 48503

ANTHONY J MILTICH MD
915 S GRAND TRAVERSE
FLINT MI 48503

JAN C MOELLER MO
3102 WESTWOOO PKY
FLINT MICHIGAN 48503

BEHROUZ MOGHTASSEO MD
1818 R T LONGWAY BLVD
FLINT MI 48503

GLENN E MOORE MD
323 W SECOND
FLINT MI 48503

WILLIAM H S MOORE MD
1201 FLUSHING RO
FLINT MI 48504

ALAN L MORGAN MD
3169 W PIERSON RD
FLINT MI 48504

PAUL MORIN MD
1968 MILLER RD
FLINT MICHIGAN 48503

VAUGHN H MORRISSEY MD
101 STOCKDALE ST
FLINT MI 48503

EDWARD C MOSIER MD
1730 OVERHILL DR
FLINT MI 48503

WILLYS F MUELLER MO
13335 PAMONA OR
FENTON MI 48430

E GRANT MURPHY MD
118 MEDICAL ARTS BLOG
FLINT MI 48504

S H NASSAR MD
8483 HOLLY RD
GRAND BLANC MI 48439

ALFRED E NEUFFER MD
5384 TERRITORIAL RD
GRAND BLANC MI 48439

WM W NICHOLLS MD
806 W SIXTH AVE
FLINT MI 48503

DONALO A NITZ MD
1818 ROBERT T LONGWAY
FLINT MI 48503

OAVID E OJEOA MO
3169 W PIERSON RD
FLINT MI 48504

MARY RUTH OLOT MD
602 S LYNCH ST
FLINT MI 48503

ROBT S ORMONO MO
HURLEY HOSPITAL
FLINT MI 48502

SEYMOUR L OSHER MO
315 E COURT ST
FLINT MI 48503

MARJORIE OTERO MO A
307 SUNNYSIOE OR
FLUSHING MI 48433

RUITSON OUYANG MD
3083 FLUSHING RO
FLINT MI 48504

HEEDONG PARK MD
3169 W PIERSON RD
FLINT MI 48504

JOON H PARK MO
1708 GENESEE TOWERS
FLINT MI 48502

BURT A PARLIAMENT MO
5126 OYEHILL COURT
FLINT MI 48504

RICHARD O PELHAM MO
3306 FLUSHING RO
FLINT MI 48504

ARCHIBALD C PFEIFER MO L
9798 PALMETTO CLUB DR
MIAMI FL 33157

LYNN A PHELPS MO
10122 JANAROY CT
GOODRICH MICH 48438

A F PHILLIPS MD
X RAY DEPT HURLEY HOSP
FLINT MICHIGAN 48502

WOODROW H PICKERING MO
1602 BALLENGER HWY
FLINT MI 48504

B PIETRUSZKA MO
5210 LAPEER RD
FLINT MI 48503

WALLACE W PIKE MO
7514 MILLER RD
SWARTZ CREEK MI 48473

ALICE LEE PLATT MO A
5551 TERRITORIAL RO
GRAND BLANC MI 48439

JACK E PORTNEY MD
725 STEVENS ST
FLINT MI 48503

W D POUGNET MD
6155 MAPLE RIDGE
FLINT MI 48504

OTTO J PRESTON MD
1315 MAXINE
FLINT MI 48503

JACK R PRICE MD
410 S BALLENGER HWY
FLINT MICHIGAN 48504

RICHARD W PRIOR M D
1266 S LE ROY
FENTON MICHIGAN 48430

JOHN QUIN JR MD
2765 FLUSHING RO
FLINT MI 48504

FOUAD RABIAH MD
1608 GENESEE TOWERS
FLINT MI 48502

HELEN RAOCENKO MO
302 W PIERSON RD
FLINT MI 48505

LEONID RAOCENKO MO
302 W PIERSON RO
FLINT MI 48505

OGUZ K RAMAOAN MO
8483 HOLLY RO
GRAND BLANC MI 48439

O S RAO MD
2765 FLUSHING RD #301
FLINT MI 48504

RICHARD L RAPPORT MD
808 N GRAND TRAVERSE
FLINT MI 48503

ROBERT J RATHBURN MD
1706 LAUREL OAK
FLINT MICH 48507

J MOTT RAWLINGS MD
8505 OLD PLANK RD
GRAND BLANC MI 48439

JOHN H REID M D
1301 FLUSHING RD
FLINT MI 48504

GEORGE H REYE MD
2279 E GRAND BLANC RD
GRAND BLANC MICH 48439

EDWARDO L REYES MD
420 S BALLENGER
FLINT MI 48504

ALAN K RICE MD
2008 ROBT T LONGWAY
FLINT MICHIGAN 48503

GEO F RIETH MD
1406 DAVISON ST
FLINT MI 48506

WM J ROBERSON MD
3455 LIPPINCOTT BLVD
FLINT MI 48507

M L ROBITAILLE MD
2765 FLUSHING RD
FLINT MI 48504

JOHN B ROWE MD
653 SAGINAW ST
FLINT MI 48502

WALTER Z RUNDLES MD
500 GRAND TRAVERSE ST
FLINT MI 48503

RUSSELL G SANDBERG MD
5431 FERNWOOD DR
FLINT MI 48504

FREDK E SANDCKI MD
2700 W COURT ST
FLINT MI 48503

SIRUN SARAFIAN MD
6820 CLIO RD
FLINT MI 48504

CHAS J SCAVARDA MD
1106 MAXINE
FLINT MICHIGAN 48503

RICHARD K SCHAEFER MD
3248 VAN SLYKE RD
FLINT MI 48507

NELSON S SCHAFER MD
721 W 6TH AVE
FLINT MI 48503

BENTON A SCHIFF MD
323 W 2ND ST
FLINT MI 48503

ROBT W SCHMIDLIN MD
3710 DAVISON RD
FLINT MI 48506

E OSKAR SCHREIBER MD
2765 FLUSHING ROAD
FLINT MI 48504

PAUL E SCHROEDER MD
1673 N CHEVROLET
FLINT MICHIGAN 48504

JOHN M SCHWARTZ MD
1300 N DORT HWY
FLINT MICHIGAN 48506

HEINZ H SCHWARZ
5551 TERRITORIAL RD
GRAND BLANC MI 48439

PHILLIP G SEVEN M D
2301 CUMMINGS
FLINT MICH 48503

GEO D SEYMOUR MD
G7237 N SAGINAW
MT MORRIS MICHIGAN 48458

RAMESH C SHAH MD
HURLEY HOSP RADIOLOGY
FLINT MI 48502

LEIGHTON O SHANTZ MD L
1497 COUNTRY VIEW LANE
FLINT MI 48504

JAMES P SHEEHY MD
503 S SAGINAW ST
FLINT MI 48502

DANL H SHEERAN MD
610 S VERNON AVE
FLINT MI 48503

FREDERICK SHERWOOD MD
1207 N BALLENGER HWY
FLINT MI 48504

LEWIS E SIMONI MD
3210 S DORT HGWY
FLINT MI 48507

SARJIT SINGH MD
839 MOTT FNDTN BLDG
FLINT MI 48502

J BERNARD SLOAN MD
3169 W PIERSON RD
FLINT MI 48504

R H SMALLEY MD
4437 MORRISH RD
SWARTZ CREEK MI 48473

EUGENE C SMITH MD
606 STEVENS
FLINT MICHIGAN 48503

HAROLD O SMITH MD
3769 SUNSET DR
FLINT MICHIGAN 48503

MAURICE J SMITH MD
804 METROPOLITAN BLDG
FLINT MI 48502

SIDNEY E SMITH MD
5220 PASADENA
FLUSHING MI 48433

BENJ F SNIDERMAN MD
727 BEACH ST
FLINT MI 48502

A E SOLIK MD
1201 FLUSHING RD
FLINT MICHIGAN 48504

FREDRIC M SOMACH MD
2765 FLUSHING RD
FLINT MI 48504

MORRIS L SORKIN MD
718 BEACH ST
FLINT MI 48502

SAML S SORKIN MD
718 BEACH ST
FLINT MI 48502

WARREN E SOUTHALL MD
4250 N SAGINAW ST
FLINT MICHIGAN 48505

HARVEY V SPARKS MD
2765 FLUSHING RD
FLINT MI 48504

RALPH S STEFFE MD
2765 FLUSHING RD
FLINT MI 48504

FLOYD H STEINMAN MD
503 S SAGINAW ST
FLINT MI 48502

PHILIP K STEVENS MD
1116 MOTT FDTN BLDG
FLINT MICH 48502

RUDOLPH W STREAT MD L
8100 DAVISON RD
DAVISON MI 48423

CLAYTON K STROUP MD
2002 E COURT ST
FLINT MI 48503

M R SULLIVAN MD
5352 PEPPERMILL RD
GRAND BLANC MICHIGAN 48439

JAMES K SUTHERLAND MD L
402 E 3RD ST
FLINT MI 48503

GEO D SUTTON MD L
303 W COURT ST
FLINT MI 48503

GENE D TANG MD A
MUNSON MED CTR PATH
TRAVERSE CITY MI 49684

JOHN W TAUSCHER MD
2016 R T LONGWAY BLVD
FLINT MICHIGAN 48503

WALTER I THEUERLE MD
3117 CLIO RD
FLINT MI 48504

CHARLES A THOMPSON MD
1201 SAN JUAN
FLINT MI 48504

JACK W THOMPSON MD
2702 FLUSHING RD
FLINT MI 48504

PETER S THOMS MD
1368 W COLDWATER RD
FLINT MICH 48505

ELMER H TOFTELAND MD
2765 FLUSHING RD
FLINT MI 48504

RITA B TOWER MD L
ELMS TRAILER PARK D4
2801 S DORT HWY
FLINT MI 48507

ALLEN F TURCKE MD
1245 DUPONT ST
FLINT MI 48504

MERALD G TURNER MD
G 3169 W PIERSON
FLINT MI 48504

ARTHUR L TUURI MD
MOTT CHILDREN CLINIC
FLINT MICH 48502

EROL UCER MD
801 S SAGINAW
FLINT MI 48502

VERNON URICH MD
3169 W PIERSON RD
FLINT MICHIGAN 48504

DOUGLAS VANBROCKLIN MD
1300 N DORT HWY
FLINT MI 48506

J O VANBROCKLIN MD
2620 FLUSHING RD
FLINT MI 48504

FREDK W VAN DUYNE MD
2849 MILLER RD
FLINT MICHIGAN 48503

RAYMOND S VAN HARN MD
808 N GRAND TRAVERSE
FLINT MICHIGAN 48503

S VARJAVANDI MD
3169 W PIERSON RD
FLINT MI 48504

HOWARD L VARNEY MD
1818 ROBT LONGWAY BLVD
FLINT MICHIGAN 48503

ADNAN D VAROL MD
2279 GRAND BLANC RD
GRAND BLANC MI 48439

NICHOLAS N VELARDE MD
3083 FLUSHING RD
FLINT MI 48504

L WILLIAM VERGITH MD
2765 FLUSHING RD
FLINT MI 48504

DAVID L VER LEE MD
503 S SAGINAW ST
FLINT MI 48502

V VILLARREAL MD
1374 COUNTRYVIEW LANE
FLINT MI 48504

FRANKLIN V WADE MD
808 N GRAND TRAVERSE
FLINT MICHIGAN 48503

CARVER G WALCOTT MD
201 E CAROLINA ST
FENTON MICH 48430

JAMES D WALKER MD
8483 HOLLY RD
GRAND BLANC MI 48439

DANIEL L WALTER MD
9311 ROUND HILL CT
GRAND BLANC MI 48439

RICHARD E WEBER MD
420 S BALLENGER HWY
FLINT MI 48504

ROBT M WEBER MD
3710 DAVISON RD
FLINT MI 48506

WILLIAM J WEBER MD
721 W 6TH AVE
FLINT MI 48503

JOHN E WENTWORTH MD
420 S BALLENGER
FLINT MI 48504

SOLOMON C WERCH MD
7320 S STATE RD
GOODRICH MI 48438

INGA W WERNESS MD L
220 EAST FOURTH ST
FLINT MI 48503

GEORGE A WEST MD
4250 N SAGINAW
FLINT MI 48505

J D WHEELER M D
118 MEDICAL ARTS BLDG
FLINT MI 48504

CARL H WHITE MD
106 RIVER ST
FENTON MICH 48430

FRANK T WHITE MD
9244 LAPEER RD
DAVISON MI 48423

ROBT H WILLARD MD A
718 BEACH ST
FLINT MI 48502

WM S WILLIAMS MD L
12025 S SAGINAW BLDG 7
GRAND BLANC MI 48439

THOS N WILLS MD R
2760 N E 29TH
POMPANO BEACH FL 33064

DALE A WILSON MD
2765 FLUSHING RD
FLINT MI 48504

NAN D WOLCOTT MD R
7506 LAPEER RD
DAVISON MI 48423

MELVYN O WOLF MD
G3083 FLUSHING RD
FLINT MI 48503

GEO W WRIGHT JR MD
6820 CLIO RD
FLINT MI 48504

MYRON G ZEIS MD
336 W FIRST ST
FLINT MI 48502

DANIEL M ZELKO MD
4071 RICHFIELD RD
FLINT MICHIGAN 48506

GOGEBIC

SAML G ALBERT MD
103 SUFFOLK ST
IRONWOOD MICH 49938

DONALD L DAVIDSON MD
200 S SOPHIE ST
BESSEMER MICH 49911

JOHN R FRANCK JR MD
401 SUNDAY LAKE
WAKEFIELD MICH 49968

BELA GALLO MD
NEWPORT CLINIC
IRONWOOD MICH 49938

MICHAEL A GERTZ MD L
109 E AURORA ST
IRONWOOD MICH 49938

ALLEN C GORRILLA MD
210 SUFFOLK ST
IRONWOOD MI 49938

REX R HARRINGTON JR MD
104 E RIDGE ST
IRONWOOD MICH 49938

M J LIEBERTHAL MD L
P O BOX 400
IRONWOOD MI 49938

PAUL R LIEBERTHAL MD L
BOX 400
IRONWOOD MI 49938

LESTER MEDFORD MD
306 SUNDAY LAKE ST
WAKEFIELD MICH 49968

FLORIAN J SANTINI MD
109 E AURORA ST
IRONWOOD MICH 49938

GRAND TRAVERSE

RICHARD G BARSTOW MD A
2 JASMINE ST
CRESTMOOR PARK
DENVER CO 80220

JOHN R BARTONE MD
217 S MADISON
TRAVERSE CITY MI 49684

JOHN G BEALL MD
1105 E FRONT ST
TRAVERSE CITY MICH 49684

HARRY M BLOUNT MD
1122 E FRONT ST
TRAVERSE CITY MI 49684

ELLIS S J BOLAN MD
BOX 67
SUTTONS BAY MI 49682

KNEALE M BROWNSON MD
116 CASS ST
TRAVERSE CITY MICH 49684

BENJ B BUSHONG MD R
116 CASS ST
TRAVERSE CITY MICH 49684

THOMAS D CAMPBELL MD
403 STATE ST
TRAVERSE CITY MICH 49684

WM H CARTWRIGHT MD
1105 E FRONT ST
TRAVERSE CITY MICH 49684

FREDK J CHAPIN MD
STATE HOSPITAL
TRAVERSE CITY MI 49684

OSWALD V CLARK MD
1030 SIXTH ST
TRAVERSE CITY MI 49684

THEODORE N CLINE MD
999 6TH
TRAVERSE CITY MICH 49684

WARREN W CLINE MD
999 6TH
TRAVERSE CITY MICH 49684

JOHN F COLEMAN MD
1100 SIXTH ST
TRAVERSE CITY MI 49684

ARTHUR F DUNDON MD
1100 SIXTH ST
TRAVERSE CITY MI 49684

W T EDMONDS MD
CENTRAL MICH
CHILDRENS CLINIC
MUNSON MED CTR
TRAVERSE CITY MI 49684

CLAUDE I ELLIS MD
SUTTONS BAY MI 49682

D W EVERETT MD
TRAV CITY STATE HOSP
TRAVERSE CITY MI 49684

JACK A FIEBING MD
PO BOX 283
TRAVERSE CITY MICH 49684

THOMAS E FINCH MD
1122 E FRONT ST
TRAVERSE CITY MI 49684

MAX A FINTON MD
P O BOX 368
NORTHPORT MI 49670

WM A FISHBECK MD
127 S MADISON
TRAVERSE CITY MICH 49684

ROGER C FULMER MD
217 S MADISON ST
TRAVERSE CITY MICH 49684

CHAS R HABERLEIN MD
1100 SIXTH ST
TRAVERSE CITY MICH 49684

JAMES W HALL MD
1431 PENINSULA DR
TRAVERSE CITY MICH 49684

THOMAS C HALL MD
1100 SIXTH ST
TRAVERSE CITY MI 49684

EARL E HAMILTON MD
530 S UNION ST
TRAVERSE CITY MICH 49684

JEROLD R HARWOOD MD
1100 SIXTH ST
TRAVERSE CITY MI 49684

MILDRED L HERKNER MD A
1206 PENINSULA CT
TRAVERSE CITY MI 49684

READER J HUBBELL MD L
317 WESTLAKE TERR
PALM SPRINGS CA 92262

NEVIN HUENE MD
110 E FRONT ST
TRAVERSE CITY MICH 49684

R R HUSTON MD L
ELK RAPIDS MI 49629

ROBERT C JOHNSON MD
116 CASS ST
TRAVERSE CITY MI 49684

JAMES D JOHNSTON MD
1100 SIXTH ST
TRAVERSE CITY MICH 49684

ROBT L KAMP MD
BEULAH MICH 49617

WM W KITTI MD
KALKASKA MI 49646

JAMES A KOLBERG MD
211 S HIGH ST
NORTHPORT MI 49670

SEIICHI KOMESU MD
BOX C
TRAVERSE CITY MICH 49684

KEITH G LIEDING MD A
1333 WISTERIA DR
ANN ARBOR MI 48104

LAWRENCE S LOESEL MD
2829 PRINCETON DR
TRAVERSE CITY MI 49684

ROBT T LOSSMAN MD
J DECKER MUNSON HOSP
TRAVERSE CITY MICH 49684

CHARLES T LOUISELL MD
P O BOX 581
TRAVERSE CITY MI 49684

ADAM C MC CLAY M D
217 S MADISON ST
TRAVERSE CITY MICH 49684

WM J MCCOOL MD
1100 SIXTH ST
TRAVERSE CITY MI 49684

MICHAEL D MCMANUS MD
1100 SIXTH ST
TRAVERSE CITY MI 49684

STANLEY L MICHAEL MD
335 DAVIS ST
TRAVERSE CITY MICH 49684

JOHN G MILLIKEN MD
224 CIRCLE DR
TRAVERSE CITY MICH 49684

KENNETH H MUSSON MD
9680 PENINSULA DR
TRAVERSE CITY MI 49684

ROBT E PEARSON MD A
611 BIRCHWOOD AVE
TRAVERSE CITY MI 49684

MAURICE S PELTO MD
MUNSON HOSPITAL
TRAVERSE CITY MICH 49684

WM D PETERSON MD
876 E FRONT ST
TRAVERSE CITY MICH 49684

CLARK D PHELPS MD
1321 PENINSULA DR
TRAVERSE CITY MI 49684

DONALD G PIKE MD
1209 E 8TH ST
TRAVERSE CITY MICH 49684

FRANK H POWER MD
116 CASS ST
TRAVERSE CITY MICH 49684

DAYTON SALON MD
1030 6TH ST
TRAVERSE CITY MICH 49684

EDW P SCHEIDLER JR MD
10610 PENINSULA DR
TRAVERSE CITY MI 49684

DWIGHT M SCHROEDER MD
NORTHPORT MICHIGAN 49670

CHARLES W SHIPMAN MD
2040 INDIAN TRAIL BLVD
TRAVERSE CITY MI 49684

L P SKENDZEL MD
MUNSON HOSPITAL
TRAVERSE CITY MICH 49684

M DUANE SOMMERNESS MD
BOX C
TRAVERSE CITY MICH 49684

F T SORUM MD
BOX C
TRAVERSE CITY MICH 49684

JOHN R SPENCER MD
1124 E FRONT ST
TRAVERSE CITY MICH 49684

JOS C STEFFEY MD
116 CASS STREET
TRAVERSE CITY MICH 49684

G EDWARD STOKES MD
1100 SIXTH ST
TRAVERSE CITY MICH 49684

FRED G SWARTZ M D L
612 SIXTH ST
TRAVERSE CITY MI 49684

BERNARD J SWEENEY MD
1100 SIXTH ST
TRAVERSE CITY MICH 49684

FREDK R THACKER MD
FRONT ST
FRANKFORT MICH 49635

LEONARD J THILL MD
BOX C
TRAVERSE CITY MI 49684

RICHARD L THIRLBY MD
228 S MADISON
TRAVERSE CITY MICH 49684

CREIGHTON A WAGENER MD
1100 SIXTH ST
TRAVERSE CITY MICH 49684

JACK E WEIH MD
1105 E FRONT ST
TRAVERSE CITY MICH 49684

HARRY L WEITZ MD
MUNSON HOSP
TRAVERSE CITY MICH 49684

PAUL H WILCOX MD
333 SIXTH ST
TRAVERSE CITY MICH 49684

PHILIP K WILEY MD
116 CASS ST
TRAVERSE CITY MICH 49684

CHAS R WILLIAMS MD
416 SIXTH ST
TRAVERSE CITY MICH 49684

GORDON W WILLOUGHBY MD
104 5TH ST
FRANKFORT MICHIGAN 49635

LAVERN V WOLFGRAM MD
850 E FRONT ST
TRAVERSE CITY MI 49684

ROBERT G WONACOTT MD
107 DEXTER ST
ELK RAPIDS MI 49629

J K WRIGHT JR MD
1105 E FRONT ST
TRAVERSE CITY MI 49684

RICHARD E WUNSCH MD
207 CIRCLE DR
TRAVERSE CITY MICH 49684

JOHN HARLEY YOUNG MD
CHILDRENS CLINIC
TRAVERSE CITY MICH 49684

IRWIN H ZIELKE MD
106 S MADISON
TRAVERSE CITY MICH 49684

GRATIOT

ALFRED L ALDRICH MD
ITHACA MICH 48847

A ROBERT BAUER JR MD
412 E BROADWAY
MT PLEASANT MICH 48858

ORHAN BAYBURA MD
503 E MAIN ST
EDMORE MI 48829

MYRON G BECKER MD
EDMORE MI 48829

ANDREW V BEDO MD
802 GORDON
MT PLEASANT MI 48858

JOS H BERGIN MD
112 E SUPERIOR
ALMA MICH 48801

PAUL J BRAT MD
245 WARWICK DR
ALMA MI 48801

E J BRENNER MD R
1030 NORTH DRIVE
MT PLEASANT MI 48858

LOREN G BURT MD
5878 JEROME RD R#1
ALMA MICHIGAN 48801

RAY W CHAMBERLAIN MD
608 E CHIPPEWA
MOUNT PLEASANT MICH 48858

SOUREN L CHAMICHIAN MD
CANAL RD
MT PLEASANT MI 48858

LIONEL L DAVIS MD
GEN DELIVERY
BLOWING ROCK N C 28605

DONALD DUNLOP M D
301 EAST FOURTH ST
CLARE MICH 48617

WM F FISHBAUGH JR MD
245 WARWICK DR
ALMA MICHIGAN 48801

T E HADDAD MD
712 MICHIGAN AVE
ST LOUIS MI 48880

KUNO HAMMERBERG MD
622 MC EWAN
CLARE MICH 48617

WM L HARRIGAN MD R
90TH AVE @ SCH SEC LK
MECOSTA MI 49332

FRANK W HEDGES MD
215 W SAGINAW
ST LOUIS MICHIGAN 48880

WM E HERSEE MD
306 S COLLEGE
MOUNT PLEASANT MICH 48858

A DEANE HOBBS MD R
1506 NE 11TH ST
WINTER HAVEN FL 33880

FRANK O JOHNSON MD A
914 S KINNEY
MT PLEASANT MICH 48858

PHILIP R JOHNSON MD
206 S COLLEGE AVE
MOUNT PLEASANT MICH 48858

ROBERT B JOHNSON MD
R 1
ITHACA MICHIGAN 48847

LE ROY W JUHNKE MD
314 S BROWN ST
MT PLEASANT MI 48858

JAMES D KLAUER MD
COMMUNITY HOSPITAL
MT PLEASANT MICHIGAN 48858

B B KUMAR MD
MT PLEASANT STATE HOME
MT PLEASANT MI 48858

MICHAEL R LINN MD
GRATIOT COMM HOSPITAL
ALMA MI 48801

ALEXSANDRS LUSIS MD R
1105 SNYDER AVE
ANN ARBOR MI 48103

STEWART C MC ARTHUR MD L
BOX 32
ROSEBUSH MI 48878

EDWIN G MEYER MD
ALMA MICHIGAN 48801

JOHN J MINSTER MD
314 S BROWN ST
MT PLEASANT MI 48858

DONALD F NAGLER MD
1360 TOMAH DRIVE
MT PLEASANT MI 48858

MARION E NANCE MD
P O BOX 157
WEIDMAN MI 48893

MARTIN M NOSAN MD
1105 KENT DR R#3
MT PLEASANT MI 48858

ROBERT M PATTERSON MD
300 WARWICK DR
ALMA MI 48801

CARLOS A PHILIPPON MD
255 WARWICK DRIVE
ALMA MICHIGAN 48801

HAROLD V RACINE MD
BOX 46
ITHACA MI 48847

RUSSELL M RAGAN MD
505 HIAWATHA DR
MT PLEASANT MI 48858

ROBERT K RANK MD
CENTRAL COMM HOSPITAL
MT PLEASANT MICHIGAN 48858

HAROLD J REESE MD
1100 VERNON DR APT 4
MT PLEASANT MI 48858

RICHARD J REMSBERG DD O
309 STATE ST
ALMA MI 48801

WM J ROTH MD
255 WARWICK DR
ALMA MICHIGAN 48801

JOHN L ROTTSCHAEFER MD
3580 NORTHLAWN PK
ALMA MICH 48801

WILMER M RUTT MD
310 WARWICK DR
ALMA MI 48801

LEWIS F SANDEL MD
245 WARWICK DR
ALMA MI 48801

JACK F SANDERS MD
MICH MASONIC HOME
ALMA MICH 48801

LINCOLN B SCOTT JR MD
412 OVERLAND
CHAPEL HILL N C 27514

A A SHEPERDIGIAN MD
421 S FANCHER
MT PLEASANT MI 48858

DENNIS V SMITH MD L
1435 CAMBRIDGE RD
ANN ARBOR MI 48104

O A SORIANO MD
1115 WATSON
MT PLEASANT MI 48858

JACK STACK MD
510 PROSPECT
ALMA MICHIGAN 48801

JAMES F TILDEN MD
GRATIOT COMMUNITY HOSP
ALMA MI 48801

ANDREW H VELDHUIS MD
801 GORDON RD
MT PLEASANT MICH 48858

RICHARD L WAGGONER MD
712 MICHIGAN AVE
ST LOUIS MI 48880

C HARRY WALLMAN MD
901 STATE ST
ALMA MICHIGAN 48801

LEO R WICKERT MD
1001 WATSON RD
MT PLEASANT MICH 48858

REX A WILCOX MD
525 STATE ST
ALMA MICH 48801

THEODORE WILL MD
314 S BROWN ST
MT PLEASANT MI 48858

EARL C WILSON MD
HARRISON MI 48625

KENNETH P WOLFE MD
510 PROSPECT AVE
ALMA MI 48801

CORNELIUS B WOOD MD R
ROUTE 2
MT PLEASANT MI 48858

JOHN M WOOD MD
1108 WATSON RD
MT PLEASANT MICH 48858

HILLSDALE

MORTON P BATES MD A
1721 ROOSEVELT BLVD
YPSILANTI MI 48197

WILLIAM B DAVIS MD
55 BARRY
HILLSDALE MICHIGAN 49242

LUTHER W DAY MD A
311 E OCEAN AVE
LANTANA FL 33460

EDMOND HENELT MD
32 S BROAD
HILLSDALE MICHIGAN 49242

CHAS L HODGE MD
READING MI 49274

DONALD F LARSON MD
25001 NEWTON
DEARBORN MI 48124

JOHN A MAC NEAL MD
379 S BROAD
HILLSDALE MICH 49242

H FRAZYER MATTSON MD
32 S BROAD ST
HILLSDALE MICH 49242

CARL A PETERSON MD A
BOX 46 COCO SOLO
CANAL ZONE

WARD O POWERS MD
214 SOUTH ST
JONESVILLE MI 49250

CLARK B SMITH MD
36 HIGHLAND ST
HILLSDALE MI 49242

ARTHUR J STEIN MD
144 BUDLONG ST
HILLSDALE MICH 49242

ARTHUR W STROM MD
32 S BROAD ST
HILLSDALE MICH 49242

JOHN TARR MD
CAMDEN MICHIGAN 49232

DONALD G TRAPP MD
32 S BROAD ST
HILLSDALE MICH 49242

CHARLES T VEAR MD
252 S HOWELL ST
HILLSDALE MI 49242

HOUGHTON

LEONARD C ALDRICH MD
301 QUINCY ST
HANCOCK MI 49930

JOSEPH F BARON MD
242 IROQUOIS
LAURIUM MI 49913

HONORATO BARRIOS MD
424 QUINCY ST
HANCOCK MICHIGAN 49930

PETER E CARMODY MD
1019 MAIN ST
L ANSE MI 49946

HUGO H CASTILLA MD
770 N MAIN ST
L ANSE MICHIGAN 49946

WM R CLARK JR MD
MOYER DIAG CLINIC
BARAGA MI 49908

DAVID H GILBERT MD
146 OSCEOLA ST
LAURIUM MI 49913

PAUL G GOODREAU MD
416 SHELDON AVE
HOUGHTON MI 49931

RAYMOND E HILLMER MD L
RT#5 BOX 518 COPRA LN
FT MYERS FL 33901

ANTON J JANIS MD L
200 EAST ST
HANCOCK MI 49930

FREDK E KOLB MD
128 CALUMET AVE
CALUMET MICH 49913

IVAN A LA CORE MD A
368 SHADOW MT DR #1175
EL PASO TEXAS 79912

TAMAS D LANCZY MD
BARAGA COUNTY HOSPITAL
LANSE MICHIGAN 49946

FORREST W LARSON MD
322 SHELDEN
HOUGHTON MICH 49931

VICTOR E LEPISTO MD
210 QUINCY ST
HANCOCK MI 49930

MAURICE O MEIER MD
1033 MINE ST
CALUMET MICH 49913

PERCY J MURPHY MD R
121 CALUMET AVE
CALUMET MI 49913

HOWARD OTTO MD
ST JOSEPH HOSPITAL
HANCOCK MI 49930

KENNETH L REPOLA MD
CALUMET PUBLIC HOSP
CALUMET MI 49913

ANDREW M ROCHE MD
221 5TH ST
CALUMET MICH 49913

JOHN C ROWE MD
212 FLORIDA ST
LAURIUM MI 49913

KENNETH E ROWE MD
107 1/2 CALUMET AVE
CALUMET MICHIGAN 49913

WILFRED J ROWELL MD R

EAGLE HARBOR MI 49951

PAUL S SLOAN MD
609 SHELDON AVE
HOUGHTON MICH 49931

CARL D SONNEMANN MD
STUDENT HLTH SERV
MICH TECH UNIV

HOUGHTON MI 49931

JOHN A STROUBE MD
522 W THIRD
L ANSE MICH 49946

RUTH M WARING MD
P O BOX 199
CHASSELL MI 49916

MARSHALL S WILLIAMS MD
ST JOSEPHS HOSPITAL
HANCOCK MICH 49930

HURON

J N BROUILLETTE MD
125 N HANSELMAN
BAD AXE MI 48413

RALPH C DIXON MD
BOX 77
PIGEON MICH 48755

CHAS S ELLIOTT MD

PIGEON MI 48755

C CLARK HERRINGTON MD
125 N HANSELMAN
BAD AXE MICHIGAN 48413

K B HERRINGTON MD
317 PORT CRESCENT
BAD AXE MICHIGAN 48413

KENNETH S KUBE MD

BAD AXE MI 48413

J M MULLANEY JR MD A
1050 WALL ST APT 1C
ANN ARBOR MI 48105

ROBERT W OAKES MD
7890 SAND BEACH RD
HARBOR BEACH MI 48441

CHAS W OAKES JR MD

HARBOR BEACH MI 48441

GORDON R RADY MD
P O BOX 924
PORT HURON MI 48060

CLARE A SCHEURER MD

PIGEON MI 48755

JOSEPH SIDAGIS MD
6 W MAIN ST
SEBEWAING MI 48759

MAURICE G SORENSEN MD
P O BOX
ELKTON MICH 48731

EDWARD E STEINHARDT MD

BAD AXE MI 48413

MANUEL L TEVES MD
119 S SECOND ST
HARBOR BEACH MI 48441

PHILLIP R TURNER MD
230 S FIRST ST
HARBOR BEACH MICH 48441

ROBERT A WILLITS MD
193 N MAIN ST
ELKTON MICHIGAN 48731

INGHAM

CHARLES ADAMS MD
2909 E GRAND RIVER
LANSING MICHIGAN 48912

MAGNUS H AGUSTSSON MD A
701 N LOGAN
LANSING MI 48914

DONALD J AIKEN MD
GRANDVIEW & GRAND RV
OKEMOS MICH 48864

REUBEN G ALEXANDER MD L
133 CRUM ST
LAINGSBURG MI 48848

ROBERT E ALLEN JR MD
1322 E MICHIGAN #116
LANSING MI 48912

HARRY O ALLIS MD
2909 E GRAND RIVER
LANSING MI 48912

J K ALTLAND MD
ROUTE 2 BOX 178
LANSING MI 48917

DAVID C ASSELIN MD
1322 E MICHIGAN
LANSING MICHIGAN 48912

WALDO O BADGLEY MD
930 N WASHINGTON AVE
LANSING MI 48906

MICHAEL O BAILIE MD
DEPT OF MEDICINE-MSU
EAST LANSING MI 48823

WALTER M BAIRD MD
540 WILDWOOD
EAST LANSING MI 48823

THOS C BAKER MD
930 N WASHINGTON AVE
LANSING MICHIGAN 48906

ROBT C BASSETT MD
1322 E MICHIGAN AVE
LANSING MI 48912

RICHARD BATES M D
2909 E GRAND RIVER
LANSING MICH 48912

THEODORE I BAUER MD L
810 MICH NAT TOWER
LANSING MI 48933

OLIVER A BEAMON MD
701 N LOGAN #510
LANSING MI 48915

CHARLES A BEHNEY M D L
BOX 4256 SAN JOSE DR
BISBEE AZ 85603

ELEANOR A BERDEN MD
2630 LIBBIE DRIVE
LANSING MI 48917

HANS BERGEEST MD
1980 TAMARISK
EAST LANSING MI 48823

MILTON C BERGEON MD
1021 W DANSVILLE RD
MASON MICH 48854

CHAS J BERGER MD
BOX 1258
LANSING MI 48904

ROLLAND E BETHARDS MD
SPARROW HOSPITAL
LANSING MICHIGAN 48902

FRANK L BEVEZ MD
3209 S CAMBRIDGE RD
LANSING MICH 48910

B WAYNE BINGHAM MD
1034 E SAGINAW
LANSING MI 48906

GERTRUDE C K BLACK MD
529 W GRAND RIVER
WILLIAMSTON MICH 48895

THOMAS C BLAIR MD
1322 E MICHIGAN AVE
LANSING MICHIGAN 48912

EUGENE E BLEIL MD
1322 E MICHIGAN AVE
LANSING MICHIGAN 48912

CARL W BRADFORD MD
832 WESTLAWN
EAST LANSING MICH 48823

ROBT E BRANTLEY MD
SPARROW HOSP X-RAY
LANSING MI 48902

JAMES BRIGGS MD A
811 HULEN DR
COLUMBUS MO 65201

FREDK W BROWN JR MD
831 N WASHINGTON AVE
LANSING MICHIGAN 48906

JOSEPH C BROWN MD A
2271 N W 21ST PLACE
GAINESVILLE FL 32601

M ARTHUR BUDDEN MD
2909 E GRAND RIVER
LANSING MICHIGAN 48912

TERRY E BURGE MD
BOX 68
HOLT MI 48842

MR RICHARD U BYERRUM A
602 WILDWOOD DR
EAST LANSING MI 48823

DONALD A CAIRNS MD
P O BOX 110
MASON MICH 48854

ANTHONY O CALOMENI MD
1850 W MT HOPE
LANSING MICHIGAN 48910

RALPH G CARLSON MD
225 S WAVERLY
LANSING MI 48917

EARL I CARR MD L
1915 MOORES RIVER DR
LANSING MI 48910

JOSEPH A CARUSO MD
701 N LOGAN ST
LANSING MICHIGAN 48915

BYRON L CASEY M D
202 M A C
EAST LANSING MI 48823

THOMAS W CHAFFEE MD
209 ABBOTT RD #204
EAST LANSING MI 48823

MARIAN I G CHASKES MD
701 N LOGAN SUITE 225
LANSING MI 48915

WM D CHENEY MD
SPARROW HOSP X RAY
LANSING MICHIGAN 48902

SEONG H CHI MD
INGHAM MEDICAL HOSP
LANSING MI 48910

JOSEPH R CIPPARONE MD
ST LAWRENCE HOSP
LANSING MICHIGAN 48914

GAIUS D CLARK MD
865 PEBBLEBROOK LN
EAST LANSING MI 48823

WM E CLARK MD
809 E ASH ST
MASON MICH 48854

GEO R CLINTON MD
744 E MAPLE ST
MASON MICHIGAN 48854

FORREST C CLORE MD M

JAMES S CLOSE MD
701 N LOGAN #505
LANSING MI 48915

BEVERLY A COLLIER MD
1843 MIRABEAU
OKEMOS MI 48864

RICHARD L COLLIER MD
1843 MIRABEAU
OKEMOS MI 48864

ROBT G COMBS MD
1023 E MICHIGAN AVE
LANSING MI 48912

HOWARD C COMSTOCK MD
2909 E GRAND RIVER
LANSING MI 48912

ERRIKOS CONSTANT MD
1200 MICHIGAN AVE
EAST LANSING MI 48823

J MAXWELL COOK MD
3911 W MICHIGAN AVE
LANSING MICH 48917

HENRY E COPE MD R
605 WESTMORELAND
LANSING MI 48915

JEROME F CORDES MD
2909 E GRAND RIVER
LANSING MICHIGAN 48912

GOLDIE CORNELIUSON MD R
3225 E RIVERSIDE DR
RIV GARDEN APT 58-E

FT MYERS FL 33901

DANIEL COWAN MD
DEPT OF PATH MSU
COLLEGE OF HUMAN MED

EAST LANSING MI 48823

JOHN A COWAN MD
825 TOURAINE AVE
EAST LANSING MI 48823

J RICHARD CROUT MD
PHARMACOLOGY DEPT MSU
EAST LANSING MI 48823

HAROLD E CROW MD
1215 E MICHIGAN AVE
LANSING MICHIGAN 48912

GORDON D DAUGHARTY MD
2909 E GR RIVER #205
LANSING MI 48912

ROBERT M DAUGHERTY MD
1607 STANLAKE DR
EAST LANSING MI 48823

SANDRA DAUGHERTY MD
DEPT OF MED MSU
EAST LANSING MI 48823

DON G DAVIS
1200 MICHIGAN AVE
EAST LANSING MI 48823

C D DAWE MD
1515 W MT HOPE AVE
LANSING MICHIGAN 48910

JOHN DE BRUIN JR MD
4528 S HAGADORN RD
EAST LANSING MI 48823

MARY J B DEXTER MD A
1082 WILLANA CT
MILAN MI 48160

DONALD J DROLETT MD
1322 E MICHIGAN AVE
LANSING MICHIGAN 48912

JOHN F DUNKEL MD
2857 RIVERWOOD COURT
PORT HURON MI 48060

FOREST M DUNN MD
1322 E MICHIGAN AVE
LANSING MICHIGAN 48912

RALPH R EDMINSTER MD
SPARROW HOSP PATH DEPT
LANSING MI 48902

ADNAN H ELDADAH MD
3500 N LOGAN
LANSING MI 48906

BERTHA W ELLIS MD L
P O BOX 2327
HOLLYWOOD FL 33022

C WARD ELLIS MD L
P O BOX 2327
HOLLYWOOD FL 33022

ALFRED ELLISON JR M D
2909 E GRAND RIVER 202
LANSING MI 48912

ALLEN J ENELOW MD
936 SOUTHLAWN
EAST LANSING MI 48823

DANIEL C ENGLISH MD
DEPT OF SURGERY
MICH STATE UNIV
COLLEGE OF HUMAN MED
EAST LANSING MI 48823

MATTHIES EVANS MD
1877 WALNUT HEIGHTS DR
EAST LANSING MI 48823

ABDUL R FAYYAD MD
1322 E MICHIGAN #318
LANSING MI 48912

KENNETH J FEENEY MD
1908 MICH NATL TOWER
LANSING MI 48933

ROGER K FERGUSON MD
DEPT OF MEDICINE MSU
EAST LANSING MI 48823

JAMES S FEURIG MD
321 KENSINGTON RD
EAST LANSING MI 48823

CLYDE R FLORY JR MD
201 W HILLSDALE
LANSING MICHIGAN 48933

ARTHUR LEE FOLEY II MD
DEPT OF ANATOMY MSU
EAST LANSING MI 48823

LEONARD M FOLKERS MD
234 MICHIGAN AVE
EAST LANSING MICH 48823

SILVIO P FORTINO MD
2909 E GRAND RIVER
LANSING MICHIGAN 48912

DOUGLAS H FRYER MD
MICH DEPT OF HLTH
LANSING MI 48906

A JOHN GARLINGHOUSE JR
1322 E MICHIGAN AVE
LANSING MICHIGAN 48912

ABRAHAM GELLAR MD
108 DIVISION
EAST LANSING MICH 48823

HARRY C GEORGE MD
909 ABBOTT RD
EAST LANSING MI 48823

RASEM GHANNAM MD
919 CHESTER RD
LANSING MI 48912

L A GINNEBAUGH MD A
1928 S CONWAY RD #24
ORLANDO FL 32806

ROY E GOLDNER MD L
1318 S WASHINGTON AVE
LANSING MI 48910

FLOYD G GOODMAN MD
4528 S HAGADORN RD
EAST LANSING MI 48823

SIDNEY R GOVONS MD
1322 E MICHIGAN AVE
LANSING MICHIGAN 48912

DAVID GREENBAUM MD
COLLEGE OF HUMAN MED
DEPT OF MED-MSU

EAST LANSING MI 48823

VIRINDER S GREWAL MD
2909 E GRAND RIVER 103
LANSING MI 48912

ANNA B GREY MD L
915 CAJON ST
REDLANDS CA 92373

JOHN A HABRA MD
919 CHESTER ROAD
LANSING MI 48912

THERESA B HADDY MD
DEPT OF HUMAN MED-MSU
EAST LANSING MI 48823

JOHN C HALL MD
1319 E MICHIGAN
LANSING MI 48912

R E HAMES MD
1322 E MICHIGAN AVE
LANSING MICHIGAN 48912

ROGER J HANNA MD R
329 E SOUTH ST
MASON MI 48854

GEORGE C HARDY MD
SPARROW HOSP PTH DEPT
LANSING MI 48902

NORMAN H HAREBOTTLE MD
209 N WALNUT
LANSING MI 48933

LOUIS E HARRINGTON MD
3526 W SAGINAW ST
LANSING MI 48917

HERBERT W HARRIS MD
919 CHESTER RD
LANSING MI 48912

WM H HARRISON MD
834 W ST JOSEPH ST
LANSING MI 48915

JESSE F HARROLD MD
326 W IONIA
LANSING MI 48933

MARK W HARROLD MD
326 W IONIA ST
LANSING MI 48933

RICHARD L HATTON MD
2321 INDIAN HILLS DR
OKEMOS MICHIGAN 48864

KENT R HAY MD
1322 E MICHIGAN AVE
LANSING MICHIGAN 48912

ROBT E HAYES MD
1322 E MICHIGAN AVE
LANSING MI 48912

WM D HAYFORD MD
1028 E SAGINAW ST
LANSING MI 48906

GORDON H HEALD MD
714 ABBOTT ROAD
EAST LANSING MICH 48823

FRANK B HECKERT MD
1105 BNK OF LNSG BLDG
LANSING MI 48933

JOS K HECKERT MD L
1105 BNK OF LNSG BLDG
LANSING MI 48933

MARK E HEERDT MD
810 W SAGINAW
LANSING MICHIGAN 48915

RAY E HELFER MD
DEPT OF HUMAN DEV
MICH STATE UNIV

EAST LANSING MI 48823

THOMAS A HELMRATH MD
227 KENBERRY DR
EAST LANSING MI 48823

DAN M HENSHAW MD
411 RIDGEWATER DR
MARIETTA GA 30060

ALBERT E HEUSTIS MD R
ROUTE #1 BOX 99
THREE RIVERS MI 49093

THOS B HILL MD
554 DURAND ST
EAST LANSING MI 48823

R J HIMMELBERGER MD R
3624 COLCHESTER
LANSING MI 48906

D BONTA HISCOE MD
2909 E GRAND RIVER
LANSING MICH 48912

JACQUE HOCHGLAUBE MD
726 ABBOTT RD
EAST LANSING MI 48823

W E HOFFER MD L
331 SHEPARD STREET
LANSING MI 48912

RAYMOND E HOGG MD
2909 E GRAND RIVER
LANSING MICHIGAN 48912

CHAS F HOLLAND MD
810 W SAGINAW
LANSING MICHIGAN 48915

PAUL HOLLISTER MD
DEPT OF MEDICINE
MICH STATE UNIV

EAST LANSING MI 48823

FRANCIS HORVATH MD
2909 E GRAND RIVER
LANSING MI 48912

JOHN C HOYT MD
BOX 66
HOLT MI 48842

CLARE C HUGGETT MD
122 W GD RIVER AVE
LANSING MICHIGAN 48906

DONALD H HULDIN MD
241 E SAGINAW #22D
EAST LANSING MI 48823

ANDREW D HUNT JR MD
COLL OF HUMAN MED MSU
EAST LANSING MI 48823

M S HURTH MD L
1717 JEROME ST
LANSING MICH 48912

E A HUTCHINSON MD
2909 E GR RIVER #208
LANSING MI 48912

ELIZABETH W IMESON MD
1809 CAHILL DRIVE
EAST LANSING MI 48823

J L ISBISTER MD
DEPT HEALTH DE WITT RD
LANSING MICH 48906

OMERO S IUNG MD N
516 TICKNER
LINDEN MI 48451

S SPRIGG JACOB III MD
201 ANN ST
EAST LANSING MICH 48823

JOHN S JACOBY MD
2701 FOURTH ST SO
MINNEAPOLIS MINN 55408

PAUL JAKUBIAK MD
1874 PENOBSCOT
OKEMOS MI 48864

BRUCE S JARSTFER MD M
806 CADDINGTON DR
SILVER SPRING MD 20902

HILLIARD JASON MD
OLIN MEM HLTH CTR MSU
EAST LANSING MI 48823

DAVID B JOHNSON MD
2909 E GRAND RIVER
LANSING MICH 48912

GEORGIA A L JOHNSON MD
2608 DARIEN DR
LANSING MI 48912

KENNETH H JOHNSON MD L
1116 MICH NAT TOWER
LANSING MI 48933

LANNY L JOHNSON MD
4528 S HAGADORN RD
EAST LANSING MI 48823

MILO L JOHNSON MD
SPARROW HOSPITAL
DEPT OF RADIOLOGY
LANSING, MI 48902

RICHARD JOHNSON MD
2909 E GRAND RIVER 202
LANSING MI 48912

FRANCIS A JONES JR MD R
815 ROYAL PALM PL
VERO BEACH FL 32960

JOHN W JONES MD
DEPT OF MEDICINE-MSU
EAST LANSING MI 48823

LESTER C JONES MD
2909 E GRAND RIVER 203
LANSING MI 48912

MARGARET JONES MD
DEPT OF PATH MSU
EAST LANSING MI 48823

MARTIN F JONES MD
2909 E GRAND RIVER
LANSING MICHIGAN 48912

DAVID KAHN MD
2909 E GRAND RIVER
LANSING MICHIGAN 48912

ROLAND E KALMBACH MD L
1322 E MICHIGAN AVE
LANSING MI 48912

STANLEY KATLEIN MD
2231 HERITAGE
OKEMOS MI 48864

HOWARD H KELLERMAN MD
4423 CALGARY BLVD
OKEMOS MI 48864

WILLIAM KELLY M D
IONIA STATE HOSPITAL
IONIA MI 48846

A EDITH HALL KENT MD L
BOX 1167
LANSING MICHIGAN 48904

FANNY H KENYON MD L
624 LASALLE BLVD
LANSING MI 48912

MOHAMED J KHAN MD
2630 RAPHAEL RD
EAST LANSING MI 48823

RAYMOND C KINZEL MD
326 W IONIA ST
LANSING MICH 48933

THOMAS R KIRK MD
252 HOLLISTER BLDG
DEPT OF PUBLIC HLTH

LANSING MI 48904

JAMES C KLOEPFER MD
401 W GREENLAWN
LANSING MI 48910

D E KNICKERBOCKER MD
1017 E GRAND RIVER
EAST LANSING MI 48823

ARTHUR F KOHRMAN MD
DEPT OF HUMAN DEV MSU
EAST LANSING MI 48823

JEROME S KOZAK MD
919 CHESTER RD
LANSING MI 48912

LESTER C KRAFT MD
209 S MAIN ST
LESLIE MICH 49251

DONALD H KUIPER MD
DEPT OF MED - MSU
EAST LANSING MI 48823

SOUNG OH KWOUN MD A
INGHAM MEDICAL HOSP
LANSING MI 48910

ROBT E LANDICK JR MD
810 W SAGINAW
LANSING MICHIGAN 48915

JOHN F LANE MD
1065 FIVE FORKS RD
VIRGINIA BEACH VA 23455

PHILIP F LANGE MD
1302 PERSHING DRIVE
LANSING MI 48910

HELEN E P LANTING MD
431 GLENMOOR #201
EAST LANSING MI 48823

PAUL E LARKEY MD
11653 S HARTEL RD
GRAND LEDGE MI 48837

HOMER I LARSON MD
1322 E MICHIGAN AVE
LANSING MI 48912

VIRGINIA D LAUZUN MD
1654 E GRAND RIVER
EAST LANSING MICH 48823

DON M LE DUC MD
1322 E MICHIGAN AVE
LANSING MICH 48912

JOS C LESHOCK MD
701 N LOGAN ST
LANSING MICHIGAN 48915

EDW B LEVERICH MD
909 ABBOTT RD
EAST LANSING MI 48823

HARRY L LEVETT MD
2909 E GRAND RIVER AVE
LANSING MICHIGAN 48912

ALVIN LEWIS MD
358 GILTNER HALL-MSU
EAST LANSING MI 48823

CLAYTON LEWIS JR MD
2909 E GRAND RIVER
LANSING MICHIGAN 48912

PAUL C LINNELL MD
1200 MICHIGAN AVE
EAST LANSING MI 48823

DONALD L LIPSEY MD
INGHAM MEDICAL HOSP
LANSING MI 48910

JOSE J LLINAS MD DIR
COMM MENTAL HLTH
COMM SERVICES BLDG
300 N WASHINGTON
LANSING MI 48933

GUSTAV M LO MD
701 N LOGAN #515
LANSING MI 48915

CHAS D LONG JR MD
2909 E GRAND RIVER
LANSING MICHIGAN 48912

MAURICE C LOREE MD
1531 ABBOTT RD
EAST LANSING MI 48823

HARRY J LOUGHRIN MD
1005 ABBOTT RD
EAST LANSING MI 48823

KAARE LOVOLL MD
P O BOX 95
HOLT MI 48842

THOS A LUCAS MD
1515 W MT HOPE
LANSING MICHIGAN 48910

LEWIS C LUDLUM MD
1126 W SAGINAW ST
LANSING MI 48915

EDWARD J LYNN MD
MSU DEPT - PSYCHIATRY
EAST LANSING MI 48823

HENRY E MALCOLM MD
1322 E MICHIGAN
LANSING MI 48912

W E MALDONADO MD
SPARROW HOSPITAL
LANSING MICHIGAN 48902

MARIA B MANDELSTAMM MD
4583 COMANCHE DR
OKEMOS MI 48864

L R MANNAUSA MD
1200 MICHIGAN AVE
EAST LANSING MI 48823

WAYNE D MARTIN MD R
4765 NAKOMA DR
OKEMOS MICH 48864

M FINETTE MARZOLF MD N
3315 WISCONSON NW
WASHINGTON DC 20016

E MAVROMATIS MD
1322 E MICHIGAN AVE
LANSING MICHIGAN 48912

F MAVROMATIS MD
1322 E MICHIGAN AVE
LANSING MICHIGAN 48912

STEPHEN G MAY MD
202 M A C AVENUE
EAST LANSING MI 48823

C RAY MC CORVIE MD L
525 NE HAYWORTH RD
PORT CHARLOTTE FL 33950

DONALD R MC CORVIE M D
WILLIAMSTON MED BLDG
WILLIAMSTON MICH 48895

LELAND R MC ELMURRY MD
209 N WALNUT ST
LANSING MI 48933

DONALD R MCFARLANE MD
1322 E MICHIGAN AVE
LANSING MI 48912

D B MC GILLICUDDY MD L
1816 MICH NATL TOWER
LANSING MI 48933

MARVIN J MCKENNEY MD
1200 MICHIGAN AVE
EAST LANSING MI 48823

B EDWARD MC NAMARA MD N
BOX 248
FAIRPLAY CO 80440

WM H MEADE MD
1023 E MICHIGAN
LANSING MICHIGAN 48912

RICHARD K MEINKE MD
1322 E MICHIGAN AVE
LANSING MICHIGAN 48912

RICHARD C MELICK MD
326 W IONIA
LANSING MI 48933

WALTER E MERCER MD R
909 GLENHAVEN
EAST LANSING MI 48823

A L MESSENGER MD
1322 E MICHIGAN AVE
LANSING MICHIGAN 48912

J T MILLER JR MD M
4307 ROBERT CT USNR
WHEATON MD 20906

WILLARD J MILLER MD
225 S WAVERLY RD
LANSING MICH 48917

ELBA MOLINA PUNG MD
SPARROW HOSPITAL
OUTPATIENT CLINIC

LANSING MI 48912

ROBT N MONFORT MD R
300 PACIFIC RD
MIAMI FL 33149

CHARLES R MOORE MD
1322 E MICHIGAN AVE
LANSING MICHIGAN 48912

DONALD B MOORE MD
1322 E MICHIGAN AVE
LANSING MI 48912

ROBT J MORROW MD R
741 S W 2ND ST
BOCA RATON FL 33432

EUGENE C NAKFOOR MD
1320 S GENESEE DR
LANSING MI 48915

JAMES C NEERING MD
1322 E MICHIGAN AVE
LANSING MI 48912

JOHN R NEUMAN MD
225 S WAVERLY RD
LANSING MICHIGAN 48917

BARNABAS NEWTON MD
401 W GREENLAWN
LANSING MI 48910

MILDRED V NICHOLAS MD R
5596 PORTAGE LAKE RD
DEXTER MICHIGAN 48130

PAUL T NILAND MD
1322 E MICHIGAN AVE
LANSING MI 48912

PAUL J OCHSNER MD R
4741 THORNAPPLE LN
LANSING MI 48917

KI WHAN OH MD
401 W GREENLAWN
LANSING MI 48910

PEDRO OJEDA MD
701 N LOGAN SUITE 212
LANSING MI 48915

FREDRIC J O NEILL MD
1322 E MICHIGAN #112
LANSING MI 48912

WM G PAINE MD
1028 E SAGINAW ST
LANSING MICHIGAN 48906

R E PALMER M D L
1627 WILDWOOD RD
CLEARWATER FL 33516

THOMAS C PAYNE MD
2909 E GRAND RIVER AVE
LANSING MICHIGAN 48912

RONALD PEETS M D
GR RIVER & GRANDVIEW
OKEMOS MICH 48864

ROBERT A PERRY MD
701 N LOGAN
LANSING MI 48915

ALVIN J PHELAN MD
920 TOWNSEND ST
LANSING MI 48921

JOHN F PLANT MD
2909 E GRAND RIVER
LANSING MICHIGAN 48912

WM H PLESSCHER MD
1322 E MICHIGAN AVE
LANSING MICHIGAN 48912

RICHARD W POMEROY MD
SPARROW HOSP
LANSING MI 48912

LUIS POSADA MD
1322 E MICHIGAN #214
LANSING MI 48912

GERALD D POWELL MD
1850 W MT HOPE
LANSING MI 48910

DONALD R QUIGLEY MD
701 N LOGAN ST
LANSING MI 48915

MAURICE S REIZEN MD
3500 NO LOGAN
MICH DEPT PUBLIC HLTH

LANSING MI 48906

EDWARD E REYNOLDS MD
RT 2 BOX 18
WILLIAMSTON MICH 48895

R G RICE MD
3500 N LOGAN ST
LANSING MICHIGAN 48914

FRANK O RICHARDS MD R
5101 FAIRFAX NW
ALBUQUERQUE N M 87114

EDWARD L RINGER MD
320 TOWNSEND ST
LANSING MI 48933

THOMAS H ROBINSON MD
PO BOX 204
LANSING MICHIGAN 48901

EDMUND J ROBSON MD
701 N LOGAN
LANSING MI 48915

LEOPOLDO RODRIGUEZ MD
810 W SAGINAW ST
LANSING MI 48915

ROBT A ROLLSTIN MD
920 TOWNSEND ST
LANSING MI 48921

LIONEL W ROSEN MD
DEPT OF PSYCHIATRY-MSU
EAST LANSING MI 48823

DAVID R ROVNER MD
DEPT OF MEDICINE
MICH STATE UNIV
COLLEGE OF HUMAN MED
EAST LANSING MI 48823

RALPH H RUHMKORFF MD R
1060 GLENHAVEN
EAST LANSING MICH 48823

SAML H RUTLEDGE JR MD
1322 E MICHIGAN AVE
LANSING MI 48912

MARY HARMON RYAN MD
2377 SEMINOLE DR
OKEMOS MI 48864

HUGO R SAENZ MD
1515 W MT HOPE
LANSING MICHIGAN 48910

JAMES H SAKER MD
201 W HILLSDALE ST
LANSING MICHIGAN 48933

CHARLES H SANDER MD
DEPT OF PATHOLOGY MSU
EAST LANSING MI 48823

IAN SAYANI MD
4792 NAKOMA DRIVE
OKEMOS MI 48864

J F SCALLIN M D
810 W SAGINAW
LANSING MICH 48915

R RUDOLPH SCHEIDT MD
201 W HILLSDALE
LANSING MICHIGAN 48933

HARRY J SCHMIDT MD
2909 E GRAND RIVER
LANSING MICHIGAN 48912

ARTHUR E SCHULTZ MD
2700 MT HOPE
OKEMOS MICH 48864

JAMES S SCOTT MD
607 TURNER ST
DEWITT MI 48820

HYMAN D SHAPIRO MD
1327 E MICHIGAN AVE
LANSING MICH 48912

MAHLON S SHARP MD
2909 E GRAND RIVER
LANSING MI 48912

MILTON SHAW MD L
320 TOWNSEND ST
LANSING MI 48933

JOSEPH L SHEETS MD
2909 E GRAND RIVER
LANSING MI 48912

GEO A SHERMAN MD L
504 COWLEY
EAST LANSING MI 48823

HARPER G SICHLER MD R
1476 STONEGATE LANE
EAST LANSING MI 48823

DAVID SIEGEL MD
2909 E GRAND RIVER
LANSING MICH 48912

ROMULO E SILVA MD
335 SEYMOUR ST
LANSING MI 48933

IRVING E SILVERMAN MD
2909 E GRAND RIVER
LANSING MICHIGAN 48912

WILLIAM J SINCLAIR MD
1200 MICHIGAN AVE
EAST LANSING MI 48823

JUSTIN L SLEIGHT MD
2909 E GRAND RIVER
LANSING MICHIGAN 48912

ANTHONY V SMITH MD
116 W SYCAMORE
MASON MICH 48854

BERNARD H SMOOKLER MD
2909 E GRAND RIVER
LANSING MICHIGAN 48912

LE MOYNE SNYDER MD R
P O BOX 5
PARADISE CA 95969

RUTH C E SNYDER MD
234 W MICHIGAN AVE
EAST LANSING MICH 48823

ALFRED J SPAGNUOLO MD
1418 S LOGAN ST
LANSING MICHIGAN 48910

J CLYDE SPENCER MD
SPARROW HOSPITAL
LANSING MICHIGAN 48902

PERRY C SPENCER MD
320 TOWNSEND ST
LANSING MI 48933

ARTHUR L STANLEY MD
401 W GREENLAWN
LANSING MICHIGAN 48910

ABRAHAM A STEINER MD R
ROUTE 3
GRAND LEDGE MI 48837

WINTON E STEPHAN MD
452 TULIP TREE LANE
EAST LANSING MI 48823

GEO D STILWILL MD
2909 E GRAND RIVER
LANSING MICHIGAN 48912

PAUL R STIMSON MD
119 E GRAND RIVER
EAST LANSING MICH 48823

BENJ J STONE MD
1005 ABBOTT RD
EAST LANSING MI 48823

ROBT M STOW MD
2909 E GRAND RIVER
LANSING MICHIGAN 48912

WALTER F STREMPEK MD
MICH DEPT PUB HLTH
3500 N LOGAN
DIV OF ADULT HLTH
LANSING MI 48906

C J STRINGER MD R
425 WALBRIDGE
EAST LANSING MI 48823

LEIF G SUHRLAND MD
DEPT OF MED MSU
EAST LANSING MI 48823

EDWIN C SUNDELL MD
1322 E MICHIGAN AVE
LANSING MICHIGAN 48912

FREDK C SWARTZ MD
720 SEYMOUR STREET
LANSING MICHIGAN 48906

SCOTT N SWISHER JR MD
DEPT OF MEDICINE MSU
EAST LANSING MI 48823

FREDK W TAMBLYN MD
909 ABBOTT RD
EAST LANSING MI 48823

D W THADEN MD
909 ABBOTT RD
EAST LANSING MI 48823

ROBT F THIMMIG MD
1322 E MICHIGAN AVE
LANSING MI 48912

HSIN CHEN TIEN MD
701 N LOGAN ST
LANSING MI 48915

FREDK C TRAGER MD
1322 E MICHIGAN AVE
LANSING MI 48912

ROBT F TRESCOTT MD
1322 E MICHIGAN AVE
LANSING MICHIGAN 48912

ROBT H TRIMBY MD
1322 E MICHIGAN AVE
LANSING MICHIGAN 48912

FRANKLIN L TROOST MD L
4378 W DELHI RD
HOLT MICH 48842

PAUL C TURNER MD
2909 E GRAND RIVER 203
LANSING MI 48912

EVA URBAN MD
540 GLENMOOR
EAST LANSING MICH 48823

T P VANDERZALM MD L
1452 CAMBRIDGE RD
LANSING MI 48910

CAROL VARNER MD
OKEMOS MEDICAL BLDG
OKEMOS MICHIGAN 48864

HUBERT P VELTEN MD
SPARROW HOSP EEG LAB
LANSING MI 48902

JOS H VENIER MD
1628 HITCHING POST RD
EAST LANSING MI 48823

DOUGLAS F WACKER MD
1323 E MICHIGAN
LANSING MI 48912

RALPH WADLEY MD

HARBOR SPRINGS MI 49740

LEO W WALKER MD
4225 APPLE TREE LANE
LANSING MICHIGAN 48917

WM B WEIL JR MD
DEPT OF HUMAN DEV MSU
EAST LANSING MI 48823

JOHN M WELLMAN MD
1236 WOODCREST LANE
EAST LANSING MI 48823

ARNOLD WERNER MD
DEPT OF PSYCHIATRY MSU
EAST LANSING MI 48823

CHAS CARL WEST MD
2909 E GRAND RIVER
LANSING MICH 48912

W DONALD WESTON JR MD
DEPT OF PSYCHIATRY-MSU
EAST LANSING MI 48823

HENRY O WICK JR DO D
VA HOSPITAL
PHYSICAL MED & REHAB

WOOD WISCONSIN 53193

JOHN G WIEGENSTEIN MD
ST LAWRENCE HOSP
LANSING MI 48914

K R WILCOX JR MD
MICH DEPT OF HEALTH
LANSING MICHIGAN 48906

STEPHEN P WILENSKY MD
ST LAWRENCE HOSP
LANSING MI 48914

THOS WILENSKY MD
701 N LOGAN ST
LANSING MICHIGAN 48915

D BRUCE WILEY MD L
921 COOLIDGE APT 3
LANSING MI 48912

HOWARD S WILLSON MD L
1052 MICH NAT L TOWER
LANSING MI 48933

RALPH WORTHINGTON MD
810 W SAGINAW
LANSING MI 48915

CHAS K WORTLEY MD
1200 E MICHIGAN AVE
EAST LANSING MI 48823

JOHN H WYLIE JR MD
2243 W GRAND RIVER AVE
OKEMOS MI 48864

KARL F YOSHONIS MD
1322 E MICHIGAN AVE
LANSING MI 48912

GERALD A ZICK MD
1322 E MICHIGAN AVE
LANSING MI 48912

LUTHER H ZICK MD
1023 E MICHIGAN
LANSING MI 48912

HERMANN A ZIEL JR MD
MICH DEPT OF HEALTH
LANSING MICHIGAN 48906

IONIA

D HESS ANDERSON MD
207 BRIDGE ST
PORTLAND MICH 48875

LEANDRE I BAUTISTA MD
910 E LINCOLN AVE
IONIA MI 48846

W BRUCE BENNETT MD
LAKEVIEW HOSPITAL
LAKEVIEW MICHIGAN 48850

WM L BIRD MD
917 W OAK ST
GREENVILLE MICHIGAN 48838

ALFREDS A BIRZGALIS MD
IONIA STATE HOSP
IONIA MICH 48846

JACK H BUCK MD
517 DIVISION
IONIA MICHIGAN 48846

LEO W BUNCE MD

TRUFANT MI 49347

SANTIAGO C CABERTO MD
685 W RIVERSIDE DR
IONIA MI 48846

RICHARD E CAMPBELL MD
104 S KIDD
IONIA MICH 48846

CESAR H COLON BONET MD
LAKEVIEW MDCL CTR
LAKEVIEW MI 48850

LLOYD S DUNKIN MD L
410 S CLAY ST
GREENVILLE MICH 48838

JOHN HALICK MD
200 S FRANKLIN
GREENVILLE MI 48838

CARL M HANSEN MD

STANTON MI 48888

ROBT H HASKELL MD L
ZETLANDS ESTATE TWR
NEVIS LEEWRD ISL BWI

GLENN W HOUSE JR MD
1200 W OAK ST
GREENVILLE MICH 48838

NIKOLAS KAZMERS MD

LAKEVIEW MI 48850

JOS KOPCHICK MD

MUIR MI 48860

MARTIN J KOZACHIK MD
123 BRIDGE ST
PORTLAND MICH 48875

JOHN L LONDON MD
LAKEVIEW MEDICAL CTR
LAKEVIEW MI 48850

LEO L MARSTON MD
BOX 235
LAKEVIEW MICH 48850

FRANK A MERCHUN MD
11804 W CARSON CITY RD
GREENVILLE MICHIGAN 48838

JEKABS NAGLINS MD R
3475 S OCEAN BLVD #105
PALM BEACH FL 33480

BRUCE C OLSEN MD
917 W OAK ST
GREENVILLE MICHIGAN 48838

R J O MALLEY MD
910 E LINCOLN
IONIA MICHIGAN 48846

ROBT E RICE MD
420 S BOWER ST
GREENVILLE MI 48838

PERRY C ROBERTSON MD L
327 CENTER ST
IONIA MI 48846

G JAY ROTTMAN MD
6413 N LAFAYETTE
GREENVILLE MICHIGAN 48838

LOUIS E SANFORD MD
302 S BRIDGE ST
BELDING MI 48809

MILTON E SLAGH MD

SARANAC MI 48881

ROBT O SMITH MD
910 E LINCOLN AVE
IONIA MI 48846

EDMUND S SOCHA MD L
1612 N E 56TH
FORT LAUDERDALE FL 33308

ROBERT SOSA MD
P O BOX 32
BELDING MI 48809

CHARLES E STEVENS MD
513 N LAFAYETTE ST
GREENVILLE MICH 48838

JOHN F TANNHEIMER MD
525 LAFAYETTE ST
IONIA MICH 48846

AHMAD YOUNIS MD
1205 W OAK ST
GREENVILLE MICHIGAN 48838

JACKSON

A O ABRAHAM MD
1930 HERKIMER DR
JACKSON MI 49203

ELLIS W ADAMS MD
720 W FRANKLIN
JACKSON MICHIGAN 49201

J H AHRONHEIM MD
569 WILDWOOD AVE
JACKSON MICH 49201

DUANE M ALLEN MD
HANOVER MEDICAL CTR
HANOVER MICHIGAN 49241

SAUL APPEL MD
112 W MICHIGAN AVE
JACKSON MICH 49201

TURAN ARGUN MD
762 W MICHIGAN AVE
JACKSON MI 49201

JAMES C ASKINS MD
214 N WEST AVE
JACKSON MI 49201

BURHAN C BABACAN MD
569 WILDWOOD AVE
JACKSON MI 49201

GEO M BAKER MD
350 S UNION
PARMA MICH 49269

SIDNEY A BECKWITH MD
100 E MAIN ST
STOCKBRIDGE MICH 49285

JACK P BENTLEY MD
2532 SPRING ARBOR RD
JACKSON MICH 49203

MARY E N BENTLEY MD
2532 SPRING ARBOR RD
JACKSON MICH 49203

JERRY B BOOTH DDS A
123 N WEST AVE
JACKSON MI 49201

ZANE A BRASHARES MD

BROOKLYN MI 49230

RAFAEL C BRILLANTES MD
1514 FOURTH ST
JACKSON MI 49203

G R BULLEN MD L
418 THIRD ST
JACKSON MI 49201

ROBERT C BUSLEPP MD
901 REYNOLDS BLDG
JACKSON MICHIGAN 49201

F T CELIS MD
766 W MICHIGAN AVE
JACKSON MI 49201

RAY H CLARK MD
500 LANSING AVE
JACKSON MI 49201

CORWIN S CLARKE MD L
HACINDA CARMEL
CARMEL CA 93921

JAMES D CLIFFORD MD
500 LANSING AVE
JACKSON MI 49201

CHAS W COOLEY MD
MERCY HOSP
JACKSON MICH 49201

CECIL CORLEY MD L
800 CRESCENT RD
JACKSON MI 49203

ENNIS H CORLEY MD L
3923 KATHMAR DR
JACKSON MICH 49203

STEPHEN F CROWLEY MD
W A FOOTE MEM HOSP
JACKSON MI 49202

BYRNE M DALY M D
569 WILDWOOD AVE
JACKSON MICHIGAN 49201

BRUCE DAVENPORT MD
2424 SPRING ARBOR RD
JACKSON MI 49203

CUTHBERT E DE MAY MD L
901 ALBRIGHT DR
JACKSON MI 49203

JOHN D DE MAY MD
403 E MICHIGAN AVE
JACKSON MI 49201

RICHARD C DEMING MD
724 W FRANKLIN
JACKSON MICH 49201

H K FILIP MD
502 LANSING AVE
JACKSON MI 49201

ROBT E FINTON MD
608 W MICHIGAN AVE
JACKSON MICH 49201

HUGH B FOLEY MD
MERCY HOSP PATHOLOGY
524 LANSING AVE

JACKSON MI 49201

HARRY GREENBAUM MD
1203 GREENWOOD AVE
JACKSON MI 49201

BOWERS H GROWT MD L

ADDISON MI 49220

HILDA A HABENICHT MD
545 LANSING AVE
JACKSON MICH 49201

THOS L HACKETT MD
519 N EAST AVE
JACKSON MI 49202

GEO C HARDIE MD L
724 W MICHIGAN
JACKSON MICH 49201

HOWARD C HOFFMAN MD
2424 SPRING ARBOR RD
JACKSON MI 49203

JOHN B HOLST MD
606 CITY BANK BLDG
JACKSON MICH 49204

ROLAND IMPERIAL MD
843 HAZELWOOD
JACKSON MI 49203

LARRY E JENNINGS MD
766 W MICHIGAN AVE
JACKSON MI 49201

WM A JOERIN MD
1322 PARK RD
JACKSON MI 49203

HENRY A KALLET MD
FOOTE MEMORIAL HOSP
JACKSON MI 49201

JEAN P KARR MD
1615 CARLTON BLVD
JACKSON MI 49203

ALBERT H KEEFER MD

CONCORD MI 49237

CLIFFORD E KEELER MD
2424 SPRING ARBOR RD
JACKSON MI 49203

BRUCE F KNOLL MD
766 W MICHIGAN
JACKSON MI 49201

ROBT J KOBS MD
720 W FRANKLIN ST
JACKSON MICHIGAN 49201

RONALD W KORNAK MD
123 N WEST
JACKSON MI 49201

FRANK S KOROTNEY MD
720 W FRANKLIN
JACKSON MI 49201

EDWARD C LAKE MD
720 W FRANKLIN ST
JACKSON MICH 49201

WILLIAM R LATCHAW MD R
628 WEBB ST
JACKSON MICHIGAN 49202

CHAS R LENZ JR MD
405 1ST ST
JACKSON MICH 49201

ELMORE F LEWIS MD L
1112 CARLTON BLVD
JACKSON MI 49203

FREDDY G LIM MD
1310 GREENWOOD
JACKSON MI 49203

VICTOR E LINDEN MD
2025 FOURTH ST
JACKSON MICHIGAN 49203

JOHN P LUDWICK MD
237 W WASHINGTON
JACKSON MI 49201

JOHN E LUDWICK MD L
1112 BERMUDA AVE
KISSIMMEE FL 32741

GERALD I MAAS MD
1310 GREENWOOD AVE
JACKSON MICHIGAN 49203

WM E MC GARVEY MD L
161 W MICHIGAN AVE
JACKSON MI 49201

JOHN M MC LAUGHLIN MD
710 S BROWN ST
JACKSON MICH 49203

MIAR J MC LAUGHLIN MD L
710 S BROWN ST
JACKSON MI 49203

H B MC LAUTHLIN MD
1123 S BROWN ST
JACKSON MICH 49203

F P MC QUILLAN MD A
405 S HIGBY
JACKSON MICHIGAN 49203

JASON B MEADS MD L
915 S HIGBY
JACKSON MI 49203

ROBT E MEDLAR MD
719 SEVENTEENTH ST
JACKSON MICH 49203

A J MICHAUD MD
1310 GREENWOOD
JACKSON MI 49203

LORENZO MORELLI MD
401 W PROSPECT ST
JACKSON MICH 49203

RALPH A MUHICH MD
2532 SPRING ARBOR RD
JACKSON MICH 49203

NATHAN D MUNRO MD
740 W MICHIGAN AVE
JACKSON MICH 49201

BERNARD M MURPHY MD
770 BLOOMFIELD BLVD
JACKSON MICH 49201

RAY E NEWTON MD L
180 W MICHIGAN AVE
JACKSON MI 49201

HAROLD NIEKAMP MD
762 W MICHIGAN AVE
JACKSON MI 49201

STANLEY P OLEKSY MD
744 W MICHIGAN
JACKSON MICH 49201

LLOYD L OLSEN MD R
1410 W WASHINGTON
JACKSON MICHIGAN 49205

J GIL O ROURKE MD
517 WILDWOOD
JACKSON MI 49201

HAROLD L OSTER MD
1514 FOURTH ST
JACKSON MI 49203

GRANT L OTIS MD
525 WILDWOOD AVE
JACKSON MICH 49201

MUSTAFA C OZ MD
1700 WOODBRIDGE
JACKSON MI 49201

EARL E PARKER MD
207 E BELLEVUE
LESLIE MICH 49251

JOHN C PARKER MD
517 WILDWOOD
JACKSON MICHIGAN 49201

ANDREW K PAYNE MD
FOOTE MEMORIAL HOSP
JACKSON MICH 49201

GEO H PHILLIPS MD
MERCY HOSPITAL
JACKSON MICH 49201

FRANK F PRAY MD L
6533 WOODARD LAKE RD
FENWICK MI 48834

BERNARD Z REIZNER MD
815 W MICHIGAN AVE
JACKSON MI 49201

JOHN W RICE MD
421 MC NEAL ST
JACKSON MICH 49203

PHILLIP O RICHARDS MD
214 N WEST AVE
JACKSON MI 49201

RICHARD G RIES MD
720 W FRANKLIN ST
JACKSON MICH 49201

PHILIP A RILEY MD L
500 S JACKSON ST
JACKSON MI 49203

PHILIP A RILEY JR M D
500 S JACKSON ST
JACKSON MICH 49203

IGNACIO RUA MD
1810 W HIGH
JACKSON MICHIGAN 49203

PARVIZ SAMII MD
508 HARRIS BLDG
JACKSON MI 49201

WM A SAUTTER MD

HORTON MI 49246

THEOPHILE E SCHMIDT MD L
180 W MICHIGAN AVE
JACKSON MI 49201

R H SCHNEIDER MD
724 W FRANKLIN
JACKSON MICH 49201

FRANK J SCHRADER MD
502 LANSING AVE
JACKSON MI 49201

LELAND D SHAEFFER MD
1615 CARLTON BLVD
JACKSON MICH 49203

HENRY W SILL MD
724 W MICHIGAN AVE
JACKSON MICHIGAN 49201

ALFRED M SIRHAL MD

BROOKLYN MI 49230

DEAN W SMITH MD
569 WILDWOOD
JACKSON MI 49201

WM R STACKABLE MD
2307 SOUTHBROOK
MT VERNON ILL 62804

JOHN F STAGEMAN MD
123 N WEST ST
JACKSON MI 49201

LEWIS L STEWART JR MD
1919 KIBBY RD
JACKSON MICHIGAN 49203

CARL A STOLBERG MD
724 W FRANKLIN
JACKSON MICH 49201

ETHON L STONE MD
721 SEVENTEENTH ST
JACKSON MICH 49203

SAMUEL SUGAR MD
762 W MICHIGAN
JACKSON MI 49201

CECIL E TATE MD
2400 W MICHIGAN AVE
JACKSON MICH 49202

ROSS V TAYLOR MD
517 WILDWOOD AVE
JACKSON MI 49201

LEONARD F THALNER MD L
609 W MICHIGAN AVE
JACKSON MI 49201

T B THOMPSON MD
1310 GREENWOOD
JACKSON MI 49203

JAMES W TOWNSEND MD L
108 HAGUE AVE
VANDERCOOK LAKE

JACKSON MI 49203

FRANK VAN SCHOICK MD
2100 4TH ST
JACKSON MI 49203

R M VANSCHOICK MD
2100 FOURTH ST
JACKSON MICHIGAN 49203

F I VAN WAGNEN JR MD
434 WILDWOOD AVE
JACKSON MICH 49201

EDWARD E VIVIRSKI MD
603 S ELM AVE
JACKSON MICH 49203

EDWARD R WEDDON MD
R F D 2
STOCKBRIDGE MICH 49285

JOHN W WHOLIHAN MD R
604 W MICHIGAN AVE
JACKSON MICH 49201

WOODWARD A WICKHAM MD
2029 FOURTH
JACKSON MICHIGAN 49203

WARREN S WILLE MD
5325 BROWN LAKE RD
JACKSON MICHIGAN 49203

THOMAS S WITTMAN DDS A
761 W MICHIGAN AVE
JACKSON MI 49201

ANDRE Y ZARZOUR MD
707 N WISNER
JACKSON MI 49202

KALAMAZOO

HUGO A AACH MD R
425 SORRENTO CT
PUNTA GORDA FL 33950

EDWARD P AJEMIAN MD
208 BRONSON MED CTR
KALAMAZOO MICH 49006

C A ALEXANDER MD
118 W NORTH ST
KALAMAZOO MICH 49007

H DALE ALKEMA MD
1631 GULL RD
KALAMAZOO MI 49001

JAMES A AMLICKE MD
1219 SO PARK ST
KALAMAZOO MI 49001

SHERMAN E ANDREWS MD
935 JOHN ST
KALAMAZOO MI 49001

THOMAS E ANDREWS MD
1634 GULL RD #207
KALAMAZOO MI 49001

WALTER M ANGLIN MD A
7211 LANTOLLARY RD
KALAMAZOO MI 49004

BEN A APPEL MD
252 E LOVELL ST
KALAMAZOO MICH 49006

WILLIAM APPEL MD
252 E LOVELL ST
KALAMAZOO MI 49006

LLOYD E APPELL MD
126 N KALAMAZOO AVE
VICKSBURG MICH 49097

ROBT J ARMSTRONG MD R
3336 LAKESHORE DR
SAULT STE MARIE MI 49783

ENVER AYDOGAN MD
1141 S ROSE ST
KALAMAZOO MICHIGAN 49001

FREDK W BALD 111 MD
BRONSON MEDICAL CTR
KALAMAZOO MI 49006

ROBERT P BARÇALA MD
1631 GULL RD #210
KALAMAZOO MI 49001

WINONA M BARROWS MD
1500 BLAKESLEE ST
SW MICH TB CONTROL CTR

KALAMAZOO MI 49007

MANLEY L BARRY MD
10292 DOUGLAS AVE
PLAINWELL MICH 49080

WILLIAM T BATEMAN MD
914 S BURDICK
KALAMAZOO MI 49001

KEITH F BENNETT MD
252 E LOVELL ST
KALAMAZOO MICH 49006

H CURTIS BENSON MD
217 BRONSON MED CTR
KALAMAZOO MI 49006

THOMAS R BERGLUND MD
325 E CENTRE ST
PORTAGE MI 49081

V A BERGLUND MD
325 E CENTRE ST
PORTAGE MI 49081

IVOR BERRY JR MD
516 WHITES RD
KALAMAZOO MICHIGAN 49001

KENNETH J BETTEN MD
216 BRONSON MED CTR
KALAMAZOO MI 49006

ELDEAN G BETZ MD
202 BRONSON MED CTR
KALAMAZOO MI 49006

WM G BIRCH MD
252 E LOVELL ST
KALAMAZOO MI 49006

WILBUR R BIRK MD
216 BRONSON MED CTR
KALAMAZOO MI 49006

HARVEY C BOOMER MD
403 W KALAMAZOO AVE
KALAMAZOO MICH 49006

DAVID E BOSWELL MD
325 E CENTRE ST
PORTAGE MI 49081

RICHARD J BOWER MD
325 E CENTRE ST
PORTAGE MI 49081

JAMES C BRENEMAN MD
9880 E MICHIGAN
GALESBURG MI 49053

WILLIAM P BRISTOL MD
2019 RAMBLING RD
KALAMAZOO MI 49001

CARTER D BROOKS MD A
UPJOHN COMPANY
KALAMAZOO MI 49001

ARTHUR L BROWN II MD
101 BRONSON MED CTR
KALAMAZOO MI 49006

PETER P BRUE MD R
1009 CAMBRIDGE DR
KALAMAZOO MICH 49001

HARRY W BURDICK MD
1219 S PARK ST
KALAMAZOO MICHIGAN 49001

ROBT B BURRELL MD
1711 MERRILL ST
KALAMAZOO MICH 49001

WM J BUTLER MD
1631 GULL RD
KALAMAZOO MICHIGAN 49001

C GLEN CALLANDER MD
252 E LOVELL ST
KALAMAZOO MICH 49006

E R CARTER MD
1324 S PARK ST
KALAMAZOO MICHIGAN 49001

GEO F CARTLAND PHD A
1704 DOVER RD
KALAMAZOO MI 49001

RUSSELL M CASHEN MD
252 E LOVELL ST
KALAMAZOO MICH 49006

RONALD S CHIPPS MD
1017 ELDRIDGE DR
KALAMAZOO MI 49007

DALE O J CHOODS MD A
UPJOHN COMPANY
KALAMAZOO MI 49001

CLARENCE P CHREST MD
458 W SOUTH ST
KALAMAZOO MICH 49006

DANIEL K CHRISTIAN MD
252 E LOVELL ST
KALAMAZOO MICHIGAN 49006

F L CLEMENT MD
502 BRONSON MED CEN
KALAMAZOO MICHIGAN 49006

MAYNARD M CONRAD MD
252 E LOVELL ST
KALAMAZOO MICH 49006

PAUL F COOPER MD
252 E LOVELL ST
KALAMAZOO MICHIGAN 49006

F L CORNISH III MD
1634 GULL RD
KALAMAZOO MICHIGAN 49001

N WARN COURTNEY MD
458 W SOUTH ST
KALAMAZOO MI 49006

FRANKLIN COX MD
BORGESS HOSPITAL
KALAMAZOO MI 49001

KENNETH R CRAWLEY MD A
UPJOHN COMPANY
KALAMAZOO MI 49006

RAY O CREAGER MD
1218 BRONSON CIRCLE
KALAMAZOO MICH 49001

FRANCIS C CRETSINGER
2012 CHEVY CHASE BLVD
KALAMAZOO MI 49001

R E CROASDALE MD
252 E LOVELL ST
KALAMAZOO MICHIGAN 49006

JAMES P CURRAN MD
KALAMAZOO STATE HOSP
KALAMAZOO MI 49001

CYRIL J CURRAN MD
BORGESS HOSPITAL
KALAMAZOO MI 49001

RICHARD K CURRIER MD
325 E CENTRE ST
PORTAGE MI 49081

DORIS E DAHLSTROM MD
ROUTE 1
HICKORY CORNERS MI 49060

WM A DECKER MD
1207 OAKLAND
KALAMAZOO MICH 49001

RAYMOND M DEHAAN MD A
UPJOHN COMPANY
KALAMAZOO MI 49006

HAROLD E DE PREE MD
252 E LOVELL ST
KALAMAZOO MICH 49006

JOHN M DE VRIES MD
516 WHITES RD
KALAMAZOO MI 49001

NORMAN L DE WITT MD R
5131 M43 BOX 77A
HICKORY CORNERS MI 49060

LEO A DICK MD
1700 GULL RD
KALAMAZOO MICHIGAN 49001

KENNETH R DORNER MD
220 BRONSON MED CENTER
KALAMAZOO MI 49006

GLEN H DOUGLASS MD
1324 S PARK
KALAMAZOO MI 49001

BERNARD J DOWD MD
1700 GULL RD
KALAMAZOO MICHIGAN 49001

FRED M DOYLE MD R
3320 BRONSON BLVD
KALAMAZOO MI 49001

DAVID G DVORAK MD
212 BRONSON MED CTR
KALAMAZOO MI 49006

DAVID S DYKE MD
HEALTH CENTER
WESTERN MICH UNIV

KALAMAZOO MI 49001

ROBERT FABI MD
1631 GULL RD
KALAMAZOO MI 49001

AUGUST F FATH MD
1631 GULL ROAD
KALAMAZOO MICHIGAN 49001

ROBT K FERGUSON MD
1141 S ROSE ST
KALAMAZOO MICH 49001

F J FITZSIMMONS MD
GMC DIV 5200 E CORK ST
KALAMAZOO MICHIGAN 49002

ROMAN FLUNT M D
BOX A KALAMAZOO ST HOS
KALAMAZOO MI 49003

JOHN V FOPEANO MD
2121 SHEFFIELD DR
KALAMAZOO MICH 49001

ROBERT J FOSMOE MD
458 W SOUTH ST
KALAMAZOO MICHIGAN 49006

J WILLIAM FRY MD
1821 WHITES RD
KALAMAZOO MICHIGAN 49001

PAUL M FULLER MD R
1700 GULL RD
KALAMAZOO MICH 49001

ALMARIO M GARAZA MD
COPPER CO MENTAL HLTH
HOUGHTON MI 49931

CARL A GARDNER MD
1141 S ROSE ST
KALAMAZOO MICH 49001

JAMES A GARDNER MD
458 W SOUTH ST
KALAMAZOO MI 49006

ARTHUR F GEIS MD
424 JENNISON ST
KALAMAZOO MI 49007

RICHARD M GERSTNER MD
212 BRONSON MED CTR
KALAMAZOO MICHIGAN 49006

RICHARD E GIBSON MD

SCHOOLCRAFT MI 49087

WM S GLADSTONE MD
458 W SOUTH ST
KALAMAZOO MICH 49006

DANL F GLASER MD
463 ACADEMY ST
KALAMAZOO MICH 49006

GLENN E GOOD MD
2901 S WESTNEDGE
KALAMAZOO MI 49001

LOLITA G GOODHUE MD L
905 A MENLO AVE
MENLO PARK CALIF 94025

SADANANDA C M GOUD MD
325 E CENTRE AVE
PORTAGE MI 49081

ROBERT S GOVE MD
1631 GULL RD
KALAMAZOO MICH 49001

WALTER GRABOWSKI MD
315 BRONSON MED CTR
KALAMAZOO MI 49006

MICHAEL GRAF MD
1634 GULL ROAD
KALAMAZOO MI 49001

ROBT H GREKIN MD
417 FOREST ST
KALAMAZOO MI 49001

NORMAN GREMEL MD
458 W SOUTH ST
KALAMAZOO MICH 49006

KARE GUNDERSEN MD A
UPJOHN COMPANY
KALAMAZOO MI 49001

O A HADDOCK JR MD
1711 MERRILL ST
KALAMAZOO MICH 49001

JAMES A HAGANS MD
MERCK SHARP & DOHME
WEST POINT PA 19486

HAROLD F HAILMAN MD
PO BOX 430
YONKERS NY 10702

JOHN M HAMMER MD
100 MAPLE ST
PARCHMENT MICH 49004

CURTIS M HANSON MD
1324 S PARK ST #1
KALAMAZOO MI 49001

J DONALD HARE MD
516 WHITES ROAD
KALAMAZOO MI 49001

FRANK G HARRELL MD
1602 GULL RD
KALAMAZOO MICHIGAN 49001

WM D HARRELSON MD
1324 S PARK
KALAMAZOO MICHIGAN 49001

RUSSELL A HAYNER MD R
4015 PORTAGE
KALAMAZOO MICH 49001

H SIDNEY HEERSMA MD
517 PLEASANT
KALAMAZOO MICH 49001

ROBT W HEINLE MD
MED DIV UPJOHN CO
KALAMAZOO MICH 49006

J W HENDRIX MD
515 FINEVIEW
KALAMAZOO MI 49007

DONALD E HERENDEEN MD
1219 S PARK
KALAMAZOO MI 49001

DAVID K HICKOK MD
517 PLEASANT AVE
KALAMAZOO MI 49001

ROSCOE C HILDRETH MD
458 W SOUTH ST
KALAMAZOO MI 49006

ROBERT V HILL
WESTERN MICH UNIV
HEALTH CENTER

KALAMAZOO MI 49001

RALPH M HODGES MD
6565 W MAIN
KALAMAZOO MI 49001

ALBERT B HOOGMAN MD
612 DOUGLAS AVE
KALAMAZOO MICHIGAN 49007

RICHARD W HODGMAN MD
502 BRONSON MED CTR
KALAMAZOO MICHIGAN 49006

GEORGE J HOEKSTRA MD
100 MAPLE ST
PARCHMENT MICHIGAN 49004

WILLARD H HOWARD MD
1536 GULL RD
KALAMAZOO MICHIGAN 49001

EDWIN M HUBBARD MD
252 E LOVELL ST
KALAMAZOO MICHIGAN 49006

WM N HUBBARD JR MD
THE UPJOHN CO
KALAMAZOO MI 49001

A THOMAS HUDSON MD
1631 GULL RD #201
KALAMAZOO MI 49001

ROBT H HUME MD
1711 MERRILL ST
KALAMAZOO MICHIGAN 49001

JACK HUNT MD
1631 GULL RD
KALAMAZOO MICHIGAN 49001

WM C HUYSER MD L
427 S BURDICK ST
KALAMAZOO MI 49006

TEODORICO S IRA MD
935 JOHN ST
KALAMAZOO MI 49001

WM D IRWIN MD L
2333 SHEFFIELD DR
KALAMAZOO MICH 49001

JAMES P JACOBS MD
611 WHITCOMB ST
KALAMAZOO MI 49001

ROBERT A JANKE MD
1821 WHITES DR W
KALAMAZOO MI 49001

ROBT M JENNINGS MD
602 GRAND PRE AVE
KALAMAZOO MI 49007

STEPAS JOOELIS MD
KALAMAZOO STATE HOSP
KALAMAZOO MI 49001

FENIMORE T JOHNSON MD A
MED DIV UPJOHN CO
KALAMAZOO MI 49006

HAROLD C A JOHNSON MD
211 BRONSON MED CTR
KALAMAZOO MI 49006

WM H JOHNSON MD
HEALTH CTR WMU
KALAMAZOO MI 49001

FRANK O KAORNKA MD A

ARMAND KAPIK MD
1521 GULL RD
KALAMAZOO MI 49001

JOHN W KAVANAUGH MD
1631 GULL RD
KALAMAZOO MI 49001

T E KAVANAUGH MD
1634 GULL ROAD
KALAMAZOO MI 49001

WM R KAVANAUGH MD
612 DOUGLAS AVE
KALAMAZOO MICH 49007

PLINY M KEEP MD
1521 GULL RD
KALAMAZOO MICHIGAN 49001

ROBERT C KETTUNEN MD
252 E LOVELL ST
KALAMAZOO MICHIGAN 49006

ANIS A KHAN MD A
KALAMAZOO STATE HOSP
KALAMAZOO MI 49003

JOHN L KIHM MD
1219 S PARK ST
KALAMAZOO MICHIGAN 49001

JAMES B KILWAY MD
BRONSON MEDICAL CTR
KALAMAZOO MI 49006

JOSEPH E KINCAID MD
1634 GULL RD
KALAMAZOO MI 49001

WM J KLERK MD R
2421 WAITE
KALAMAZOO MICH 49001

PAUL A KOESTNER MD
1303 PORTAGE ST
KALAMAZOO MICH 49001

EVAN P KOKALES MD
WESTERN MICH UNIV
KALAMAZOO MI 49003

JOHN S KOSTIN MD
9880 E MICHIGAN AVE
GALESBURG MI 49053

WILLIAM J KUBE MD
1219 S PARK ST
KALAMAZOO MI 49001

JAMES O LAWRENCE MD A
924 SUNSET LANE
KALAMAZOO MI 49001

JAMES B LAWSON MD A
709 REGENCY SQ APT 301
KALAMAZOO MI 49001

RICHARD A LEMMER MD
252 E LOVELL ST
KALAMAZOO MICH 49006

JOHN D LITTIG MD
7171 PORTAGE AVE
KALAMAZOO MICH 49002

P M LITTLEJOHN MD
5111 WOODMONT DR
KALAMAZOO MICHIGAN 49001

W KAYE LOCKLIN MD
1141 S ROSE
KALAMAZOO MICH 49001

GEORGE J LODE MD
100 MAPLE ST
PARCHMENT MI 49004

JAMES M LOUISELL MD
611 WHITCOMB ST
KALAMAZOO MICHIGAN 49001

W CARTER LOWE MD
252 E LOVELL ST
KALAMAZOO MI 49006

JAMES W LOYND II MD
1141 S ROSE ST
KALAMAZOO MICH 49001

KONRADS V LUBAVS MD
420 JOHN ST
KALAMAZOO MICHIGAN 49006

M A MAC DONALD MD
252 E LOVELL ST
KALAMAZOO MICH 49006

HAROLD A MACHIN MD
420 JOHN ST
KALAMAZOO MICHIGAN 49006

JAMES E MAC VICAR MD
252 E LOVELL ST
KALAMAZOO MICHIGAN 49006

JAMES G MALONE MD
420 JOHN ST
KALAMAZOO MICH 49006

FREDK J MARGOLIS MD
2901 S WESTNEDGE
KALAMAZOO MICH 49001

DON MARSHALL MD
301 BRONSON MED CTR
KALAMAZOO MICH 49006

WM P MARSHALL MD
211 BRONSON MDCL CTR
KALAMAZOO MI 49006

WM B MARTIN MD
UPJOHN CO BLDG 24-2
KALAMAZOO MI 49001

DONALD G MAY MD
1634 GULL RD
KALAMAZOO MI 49001

GARY D MAYNARD MD
216 BRONSON MED CTR
KALAMAZOO MI 49006

JAMES H MCCARTHY MD
100 MAPLE ST
PARCHMENT MICHIGAN 49004

JOS S MC CARTHY MD L
2236 TIPPERARY RD
KALAMAZOO MI 49001

JOHN A MCCOLL MD
1634 GULL RD
KALAMAZOO MICHIGAN 49001

RICHARD R MCCONNELL MD
458 W SOUTH ST
KALAMAZOO MICHIGAN 49006

WM E MCNALLY MD
325 E CENTRE ST
PORTAGE MI 49081

RICHARD MELLIS MD
611 WHITCOMB ST
KALAMAZOO MI 49001

JAMES W MELLUISH MD
350 S BURDICK
KALAMAZOO MI 49006

RICHARD C MERRIMAN MD
516 WHITES RD
KALAMAZOO MICHIGAN 49001

BRUCE W MESARA MD
239 WESTVIEW
KALAMAZOO MI 49007

CARL R MOE MD
1324 S PARK ST
KALAMAZOO MICH 49001

RUSSELL E MOHNEY JR MD
1631 GULL RD
KALAMAZOO MI 49001

BASIL A MOLONY MD M
C/O ST CHARLES CLINIC
ST CHARLES MO 63301

ROGER M MORRELL MD A
4016 NICHOLS RD
KALAMAZOO MI 49001

JOHN B MORRILL MD
1634 GULL RD
KALAMAZOO MI 49001

ROY A MORTER MD L
2421 SHEFFIELD
KALAMAZOO MI 49001

ADRIAN J NEERKEN MD
404 BRONSON MED CTR
KALAMAZOO MICH 49001

FRANK J NEWMAN MD
405 BRONSON MED CTR
KALAMAZOO MI 49006

ROBT M NICHOLSON MD
517 PLEASANT AVE
KALAMAZOO MICH 49001

ANNA NOVAK MD
1706 HELEN ST
KALAMAZOO MI 49002

ERVIN NOVAK MD A
UPJOHN COMPANY
KALAMAZOO MI 49001

GEORGE H ONG MD
1631 GULL RD
KALAMAZOO MI 49001

CHAS B OVERBEY JR MD
BOX A KAZOO ST HOSP
KALAMAZOO MI 49003

SOO H PAI MD
BORGESS HOSPITAL
1521 GULL RD

KALAMAZOO MI 49001

JAMES O PANZER MD A
UPJOHN CO
KALAMAZOO MI 49006

CHAS O PEAKE III MD
252 E LOVELL ST
KALAMAZOO MICH 49006

EDWIN O PEARSON MD
458 W SOUTH ST
KALAMAZOO MI 49006

J W PEELEN MD
516 WHITES RD
KALAMAZOO MI 49001

MATTHEW PEELEN MD
252 E LOVELL ST
KALAMAZOO MI 49006

CLIFTON W PERRY MD R
1425 BALBOA
KALAMAZOO MI 49002

RAYMOND A PINKHAM MD
611 WHITCOMB ST
KALAMAZOO MICHIGAN 49001

GERALD W POWLEY MD
517 PLEASANT
KALAMAZOO MICHIGAN 49001

HAROLD M PRITCHARD MD
HEALTH CENTER WMU
KALAMAZOO MI 49003

RICHARD A PROOS MD
WESTERN MICH UNIV
KALAMAZOO MICHIGAN 49003

ALTON E PULLON MD L
1223 S PARK ST
KALAMAZOO MICH 49001

LEO B RASMUSSEN MD
152 N MAIN ST
VICKSBURG MICHIGAN 49097

HAROLD R REAMES MD
2901 S WESTNEDGE
KALAMAZOO MICHIGAN 49001

THOMAS J REIGEL JR MD
2019 RAMBLING RD
KALAMAZOO MICHIGAN 49001

GERALD H RIGTERINK MD
433 SOUTH ROSE ST
KALAMAZOO MICH 49006

MILLARD S ROBERTS MD
1631 GULL RD
KALAMAZOO MICHIGAN 49001

WALTER A ROBISON MD
1631 GULL ROAD
KALAMAZOO MI 49001

DONALD C ROCKWELL MD L
1227 JEFFERSON
KALAMAZOO MI 49007

HUGO K ROESLER MD
1141 S ROSE ST
KALAMAZOO MICHIGAN 49001

RODNEY J ROGERS M D
126 N KALAMAZOO
VICKSBURG MICH 49097

AUGUST R ROTY JR MD
252 E LOVELL
KALAMAZOO MI 49006

GARY RUOFF MD
6565 W MAIN
KALAMAZOO MI 49001

ALLAN H RUSSCHER MD
252 E LOVELL
KALAMAZOO MICHIGAN 49006

FREDK C RYAN MD
KALAMAZOO STATE HOSP
KALAMAZOO MI 49003

WM A RYE MD
UPJOHN COMPANY
KALAMAZOO MICHIGAN 49006

EDWARD O SAGE MD L
1028 PORTAGE ST
KALAMAZOO MICH 49001

SOLOMON K SAMUELS MD
1631 GULL RD #205
KALAMAZOO MI 49001

F W SASSAMAN MD
301 BRONSON MED CTR
KALAMAZOO MI 49006

DONALD S SCHAEFER MD
1324 S PARK
KALAMAZOO MI 49001

FLORA E SCHERER MD A
3628 BRONSON BLVD
KALAMAZOO MI 49001

JAMES W SCHOLL MD
1634 GULL RD
KALAMAZOO MICHIGAN 49001

ROGER A SCHOLTEN MD
252 E LOVELL
KALAMAZOO MICH 49006

R S SCHRIEBER PHD A
UPJOHN COMPANY
KALAMAZOO MI 49006

CLARENCE T M SCHRIER
KALAMAZOO STATE HOSP
KALAMAZOO MICH 49001

ALMON L SCHUT MD
401 BRONSON MED CENTER
KALAMAZOO MICHIGAN 49006

PAUL C SCHWALLIE MD A
483 SUNRISE CIRCLE
KALAMAZOO MI 49001

GARTH SHULTZ MD
217 BRONSON MED CTR
KALAMAZOO MI 49006

WM S SKELLENGER MD
2019 RAMBLING RD
KALAMAZOO MICHIGAN 49001

KAREL R SLATMYER JR MD
211 BRONSON MDCL CTR
KALAMAZOO MI 49006

ROGER J SMITH MD
3010 BROOK DRIVE
PARCHMENT MI 49004

JOSEPH T SOBOTA MD
UPJOHN CO
KALAMAZOO MI 49006

MORRIS B SOFEN MD
503 KALAMAZOO BLDG
KALAMAZOO MICH 49006

R R SPRINGGATE MD
1634 GULL RD
KALAMAZOO MICHIGAN 49001

FRANK M STEELE MD
1711 MERRILL
KALAMAZOO MI 49001

R B STEWART MD
216 BRONSON MDCL CTR
KALAMAZOO MI 49006

WM C STEWART JR MD A
2019 RAMBLING RD
KALAMAZOO MICH 49001

L O STIEGLITZ MD
218 W INKSTER
KALAMAZOO MI 49001

ANTHONY F STILLER MD R
1235 N HILLANDALE DR
KALAMAZOO MI 49001

PHILLIP B STOTT MD
102 BORGESS MED CTR
KALAMAZOO MI 49001

HOMER H STRYKER MD L
420 ALCOTT
KALAMAZOO MI 49001

SAMUEL S STUBBS MD A
5071 FOXCROFT DR
KALAMAZOO MI 49002

RAYMOND O SWANN MD
611 WHITCOMB ST
KALAMAZOO MICH 49001

EDMUND TALANDA MD
3125 W MAIN
KALAMAZOO MICH 49007

WILLIAM G TUCKER MD
1631 GULL ROAD
KALAMAZOO MI 49001

E GIFFORD UPJOHN MD R
2230 GLENWOOD DR
KALAMAZOO MICH 49001

GERALD VAN ARENDONK MD
203 UPJOHN DR
KALAMAZOO MICH 49001

PAUL VAN DEN BRINK MD
208 BRONSON MED CENTER
KALAMAZOO MI 49006

K M VANDER VELDE MD
252 E LOVELL ST
KALAMAZOO MI 49006

JAMES J VAN HARE MD
3506 LOVERS LANE
KALAMAZOO MI 49001

ALAN B VARLEY MD
2146 TREEHAVEN DR
KALAMAZOO MICHIGAN 49001

THOMAS J VECCHIO MD A
UPJOHN CO
KALAMAZOO MI 49001

WILLIAM J VENEMA MD
517 PLEASANT AVE
KALAMAZOO MI 49001

MARTIN O VERHAGE MD R
1748 GREENLAWN
KALAMAZOO MI 49007

JOHN C VOLDERAUER MD R
905 EDGEMOOR AVE
KALAMAZOO MICH 49001

PAUL WANG MD
417 FOREST ST
KALAMAZOO MI 49001

ROBT D WARNKE MD
1634 GULL ROAD
KALAMAZOO MI 49001

PRESTON S WEADON MD
252 E LOVELL ST
KALAMAZOO MICH 49006

FRED L WEDEKING MD
HLTH CENTER WMU
KALAMAZOO MI 49001

IRVING R WEISS MD
9880 E MICHIGAN
GALESBURG MI 49053

HOWARD S WHARTON MD
WMU HEALTH CTR
KALAMAZOO MI 49001

EDWIN M WILLIAMSON MD
252 E LOVELL ST
KALAMAZOO MICH 49006

DOYLE E WILSON MD
252 E LOVALL ST
KALAMAZOO MICHIGAN 49006

WILLIAM H WOODHAMS MD
6565 W MAIN
KALAMAZOO MI 49001

JACK F WU M D
810 E CENTER AVE
KALAMAZOO MICH 49001

WILLIAM G YANG MD
3125 W MAIN ST
KALAMAZOO MICHIGAN 49007

EDWARD L YAPLE MD
1141 S ROSE ST
KALAMAZOO MICHIGAN 49001

CYRIL A YOUNGS MD L
416 SO BURDICK ST
KALAMAZOO MI 49006

JOHN L ZETTELMAIER MD
6565 W MAIN
KALAMAZOO MI 49001

MARGARET H ZOLEN MD
628 S PARK ST
KALAMAZOO MICH 49007

KENT

ARSENIO B ABLAO MD
1330 BRADFORD ST NE
GRAND RAPIDS MI 49503

RAM ADVANI MD
1840 WEALTHY ST SE
GRAND RAPIDS MI 49506

GEO T AITKEN MD
50 COLLEGE AVE SE
GRAND RAPIDS MI 49503

G DONALD ALBERS MD
203 PARIS AVE SE
GRAND RAPIDS MI 49503

CHAS W ALDRIDGE JR MD
1425 MICHIGAN ST NE
GRAND RAPIDS MI 49503

FELIX S ALFENITO JR MD
515 LAKESIDE DR SE
GRAND RAPIDS MICH 49506

GEORGE O ALGER M D
2410 GAYNOR AVE NW
GRAND RAPIDS MI 49504

JERRY W ANDERSON MD
245 STATE ST SE
GRAND RAPIDS MICH 49502

HARVEY M ANDRE MD
21 MICHIGAN ST NE
GRAND RAPIDS MI 49502

V W ARMBRUSTMACHER MAJ A
USAF-MC-USAF HOSP
BOX 219

APO NEW YORK N Y 09220

ROBERT N ASHBY MD
201 LAFAYETTE AVE SE
GRAND RAPIDS MI 49503

NOYES L AVERY JR MD
515 LAKESIDE DR SE
GRAND RAPIDS MICH 49506

ROBT J BAKER MD
6850 DIVISION AVE S
GRAND RAPIDS MI 49508

DURWARD J BAKKER MD
1033 FULTON ST W
GRAND RAPIDS MI 49504

GORDON W BALYEAT MD
1810 WEALTHY ST S E
GRAND RAPIDS MI 49506

GERALD F BAROFSKY MD
808 ALGER ST S E
GRAND RAPIDS MI 49507

GORDON L BARTEK M D
833 LAKE DR SE
GRAND RAPIDS MI 49502

FRED A BAUGHMAN JR MD
1810 WEALTHY ST SE
GRAND RAPIDS MICH 49506

JERIAL A BEARD MD
245 STATE ST SE
GRAND RAPIDS MI 49502

JAMES H BEATON MD
1425 MICHIGAN ST NE
GRAND RAPIDS MI 49503

DAVID S BEEBE MD
153 LAFAYETTE AVE SE
GRAND RAPIDS MI 49503

CARL B BEEMAN MD
515 LAKESIDE DR SE
GRAND RAPIDS MI 49506

W CLARENCE BEETS MD L
124 FULTON ST E
GRAND RAPIDS MI 49502

CHAS M BELL MD
50 COLLEGE AVE SE
GRAND RAPIDS MI 49503

GEORGE J BENISEK MD
365 DOGWOOD NE
ADA MICHIGAN 49301

HOWARD G BENJAMIN MD
72 SHELDON AVE S E
GRAND RAPIDS MI 49502

ROLAND R BENSON MD
201 LAFAYETTE SE
GRAND RAPIDS MI 49503

STUART BERGSMA MD
6850 DIVISION S
GRAND RAPIDS MI 49508

MARENUS J BEUKEMA MD
6850 S DIVISION AVE
GRAND RAPIDS MI 49508

C REXFORD BIGNALL MD
21 MICHIGAN ST NE
GRAND RAPIDS MI 49502

BENJ H BIRKBECK MD
26 SHELDON AVE S E
GRAND RAPIDS MI 49502

RALPH BLOCKSMA MD
21 MICHIGAN ST NE
GRAND RAPIDS MI 49502

RICHARD C BOELKINS MD
1011 E FULTON ST
GRAND RAPIDS MI 49503

WALTER J BOERMAN MD
2410 GAYNOR AVE NW
GRAND RAPIDS MI 49504

DONALD BOERSMA MD
26 SHELDON AVE SE
GRAND RAPIDS MICH 49502

JOHN T BOET MD
750 FULLER AVE NE
GRAND RAPIDS MICH 49503

NORMAN R BOEVE MD
1810 WEALTHY ST SE
GRAND RAPIDS MI 49506

MARVIN BONZELAAR MD
2740 EASTERN AVE SE
GRAND RAPIDS MICH 49507

CRAIG E BOOHER MD
1810 WEALTHY ST S E
GRAND RAPIDS MI 49506

JAN K BOSCH MD
3852 52ND ST SW
GRANDVILLE MI 49418

A J BOTTING MD
2360 84TH ST SW
BYRON CENTER MI 49315

WM G BOUMAN MD
201 LAFAYETTE AVE SE
GRAND RAPIDS MI 49503

HAROLD E BOWMAN MD
201 LAFAYETTE SE
GRAND RAPIDS MI 49503

DAVID C BOYCE MD
515 LAKESIDE DR SE
GRAND RAPIDS MI 49506

F C BRACE MD
1498 LAKE DR S E
GRAND RAPIDS MI 49506

HARVEY J BRATT MD
833 LAKE DR SE
GRAND RAPIDS MI 49506

GEO E BRAUNSCHNEIDER
2410 GAYNOR AVE NW
GRAND RAPIDS MI 49504

J RUSSELL BRINK MD
50 COLLEGE AVE SE
GRAND RAPIDS MI 49503

ANNA H BROECKER MD
1840 WEALTHY ST SE
GRAND RAPIDS MI 49506

FRANK L BULL MD L
65 SO STATE ST
SPARTA MI 49345

JOHN B BURHANS MD
1425 MICHIGAN ST NE
GRAND RAPIDS MICH 49503

F M BURROUGHS JR MD A
3307 OTTAWA
GRANDVILLE MI 49418

M C BURTON JR MD
245 STATE ST SE
GRAND RAPIDS MI 49502

ROBERT D BURTON MD
515 LAKESIDE DR SE
GRAND RAPIDS MI 49506

WM J BUTLER MD A
6552 SHEPHERD HILLS
TUCSON ARIZ 85710

MARY L BYRD MD
700 KENT HILLS RD N E
GRAND RAPIDS MI 49505

CHARLES L CALLAWAY MD
2505 ARDMORE ST SE
GRAND RAPIDS MI 49506

MANUEL M CAMPOS MD
72 SHELDON AVE SE
GRAND RAPIDS MI 49502

SAMUEL C CAPPS M D
100 MICHIGAN ST N E
GRAND RAPIDS MICH 49503

L C CARPENTER MD
50 COLLEGE AVE SE
GRAND RAPIDS MI 49503

HOWARD S CAUKIN MD
21 MICHIGAN ST NE
GRAND RAPIDS MI 49502

WM CAYCE MD
245 STATE STREET SE
GRAND RAPIDS MI 49502

JOHN P CHAMPION MD
2060 ROBINSON RD SE
GRAND RAPIDS MI 49506

DONALD CHANDLER MD
60 MONROE AVE NW
GRAND RAPIDS MI 49502

ROBERT J CHASE M D
833 LAKE DRIVE SE
GRAND RAPIDS MICH 49506

J ROGER CHATTERTON MD A
2/14 ARTY APO
NEW YORK N Y 09093

MEY EN CHEN MD A
518 BELVEDERE DR SE
GRAND RAPIDS MI 49506

ERWIN G CLAHASSEY MD
1425 MICHIGAN ST NE
GRAND RAPIDS MI 49503

JAMES F CLARK MD
201 LAFAYETTE AVE SE
GRAND RAPIDS MI 49503

CARROLL K CLAWSON MD
445 CHERRY ST S E
GRAND RAPIDS MICH 49503

ROBT W CLAYTOR MD L
1424 MADISON AVE S E
GRAND RAPIDS MI 49507

R PAUL CLODFELDER MD
937 W FULTON ST
GRAND RAPIDS MI 49504

FREDERICK W CLOSE MD
833 LAKE DR SE
GRAND RAPIDS MI 49506

HAROLD D CRANE MD L
26 SHELDON AVE S E
GRAND RAPIDS MI 49502

JOHN A CREMER MD A
JEAN DRR MEM HOSP
DEMBI DOLLO ETHIOPIA

RICHARD K CRISSMAN MD
2747 CLYDE PARK SW
GRAND RAPIDS MICH 49509

PAUL M DASSEL MD
833 LAKE DR SE
GRAND RAPIDS MI 49506

DAVID B DAVIS MD R
266 PETTIS AVE NE
ADA MI 49301

THOMAS B DAVIS MD
1810 WEALTHY ST SE
GRAND RAPIDS MI 49506

WALTER D DAWSON MD
26 SHELDON AVE SE
GRAND RAPIDS MI 49502

ALFRED DEAN MD L
SAGOLA MI 49881

ARTHUR F DE BOER MD
2435 EASTERN AVE SE
GRAND RAPIDS MICH 49507

CLARENCE J DE BOER MD
3181 PRAIRIE S W
GRANDVILLE MICH 49418

GUY W DE BOER MD L
26 SHELDON AVE S E
GRAND RAPIDS MI 49502

BUD R DEJONGE MD
909 FULTON ST E
GRAND RAPIDS MI 49503

JAMES W DELAVAN MD
1810 WEALTHY ST SE
GRAND RAPIDS MI 49506

RICHARD M DELNAY MD
1908 MENOMINEE DR SE
GRAND RAPIDS MI 49506

HARVEY J DEMAAGD MD
3239 LAKEVIEW LN NE
GRAND RAPIDS MI 49505

J G DEN HARTOG MD A
AM EVANGELICAL MISSION
GHINDA ERITREA
ETHIOPIA

ISLA G DE PREE MD R
DRUMMOND ISLAND MI 49726

THEODORE R DEUR MD
DEUR CLINIC
GRANT MI 49327

LEON DE VEL MD R
739 PLYMOUTH BLVD S E
GRAND RAPIDS MI 49506

DANIEL A DE VRIES MD
1414 EASTERN AVE S E
GRAND RAPIDS MI 49507

KENT A DEWEY MD
456 CHERRY ST SE
GRAND RAPIDS MI 49503

NANETTE DICE MD
535 GREENWOOD AVE SE
GRAND RAPIDS MI 49506

MARK W DICK MD
146 MONROE AVE N W
GRAND RAPIDS MI 49502

MAJ W L DICKASON MC A
MEDDAC BOX 464
FT ORD CALIFORNIA 93941

DONALD G DISKEY MD
2015 BRIDGE NW
GRAND RAPIDS MI 49504

WILLIS L DIXON MD
26 SHELDON AVE S E
GRAND RAPIDS MI 49502

LUEBERT DOCTER MD
26 SHELDON AVE S E
GRAND RAPIDS MI 49502

PHILLIP J DOMMISSE MD A
REYNOLDS ARMY HOSP
FORT SILL OK 73503

HENRY A DOORN MD
2450 LEE S W
GRAND RAPIDS MI 49509

FRED A DOORNBOS MD
21 MICHIGAN ST NE
GRAND RAPIDS MI 49502

WALLACE B DORAIN MD
1810 WEALTHY ST SE
GRAND RAPIDS MI 49506

JOHN L DOYLE MD
2435 EASTERN SE
GRAND RAPIDS MI 49507

WALLACE B DUFFIN MD
3431 TRICKLEWOOD SE
GRAND RAPIDS MI 49506

ROBERT A DYE MD
124 FULTON ST E
GRAND RAPIDS MI 49502

MERLE L DYKEMA MD A
2301 RIVERSIDE DR N E
GRAND RAPIDS MI 49505

CALVIN J DYKMAN MD
515 LAKESIDE DR SE
GRAND RAPIDS MI 49506

CALVIN J DYKSTRA MD A
19981 STRATFORD RD
DETROIT MI 48221

L EDMOND EARY JR MD
222 HARPER DRIVE
SPARTA MICH 49345

CURTIS D EDHOLM MD
50 COLLEGE AVE SE
GRAND RAPIDS MI 49503

ROBERT L EGGLESTON MD
1514 WEALTHY SE
GRAND RAPIDS MI 49506

HERMAN C ELDERSVELD MD
815 ALGER ST SE
GRAND RAPIDS MICH 49507

MICHAEL E ELLIS M D
2030 LEONARD ST NW
GRAND RAPIDS MICH 49504

JOHN P ENGELS MD
8375 BAILEY DR N E
ADA MICHIGAN 49301

GEO T R FAHLUND MD
920 CHERRY ST SE
GRAND RAPIDS MI 49506

CHAS E FARBER MD
50 COLLEGE AVE SE
GRAND RAPIDS MI 49503

PAUL J FATUM MD
2054 CAMBRIDGE SE
GRAND RAPIDS MICH 49506

L H FEENSTRA MD
833 LAKE DR S E
GRAND RAPIDS MI 49506

KENNETH E FELLOWS MD
515 LAKESIDE SE
GRAND RAPIDS MI 49506

JAMES A FERGUSON MD
72 SHELDON AVE SE
GRAND RAPIDS MI 49502

LOUIS G FERRANO MD
8149 NORTHLAND DR
ROCKFORD MICH 49341

E E FIERENS MD
21 MICHIGAN ST NE
GRAND RAPIDS MI 49502

RALPH L FITTS MD
50 COLLEGE AVE SE
GRAND RAPIDS MI 49503

ERWIN L FITZGERALD MD
50 COLLEGE AVE SE
GRAND RAPIDS MI 49503

WM M FLINTOFF M D
1632 DIAMOND AVE NE
GRAND RAPIDS MI 49505

J DONALD FLYNN MD A
1761 OXFORD DR SE
GRAND RAPIDS MICH 49506

THOMAS W FOCHTMAN MD
72 E DIVISION
SPARTA MICH 49345

J CLINTON FOSHEE MD L
8400 BAILY DR BOX 131
ADA MICH 49301

JOHN P FOXWORTHY MD
50 COLLEGE AVE SE
GRAND RAPIDS MI 49503

CHARLES H FRANTZ MD R
2430 VILLAGE DR SE
GRAND RAPIDS MICH 49506

EDSON H FULLER JR MD
514 MEDICAL ARTS BLDG
GRAND RAPIDS MI 49502

RAYMOND E FULLER MD
515 LAKESIDE DR SE
GRAND RAPIDS MI 49506

WM J FULLER MD
515 LAKESIDE DR SE
GRAND RAPIDS MI 49506

KENNETH F GAMM MD
153 LAFAYETTE SE
GRAND RAPIDS MI 49503

LEONARD S GELL MD
1425 MICHIGAN ST NE
GRAND RAPIDS MI 49503

HARVEY M GENDLER MD
112 N MONROE
ROCKFORD MI 49341

DONALD G GERARD MD
1150 N HUDSON ST
LOWELL MI 49331

RALPH H GILBERT MD
26 SHELDON AVE SE
GRAND RAPIDS MICH 49502

FREDK S GILLETT MD
50 COLLEGE AVE SE
GRAND RAPIDS MICH 49503

ROBERT W GILLIES MD
100 MICHIGAN ST NE
GRAND RAPIDS MI 49503

JAMES R GLESSNER JR MD
825 LEONARD ST NE
GRAND RAPIDS MI 49503

SALOMEA J GOLDBERG MD
515 LAKESIDE DR SE
GRAND RAPIDS MI 49506

C ROBERT GOOD M D
2743 DE HOOP ST SW
GRAND RAPIDS MICH 49509

RUSSELL G GRAFF MD
515 LAKESIDE DR SE
GRAND RAPIDS MI 49506

EDWARD J GRASS MD L
3010 LAKE DR S E
GRAND RAPIDS MI 49506

FRED B GRAY M D
456 CHERRY ST SE
GRAND RAPIDS MI 49503

PERRY W GREENE JR MD
515 LAKESIDE SE
GRAND RAPIDS MI 49506

CLARE H GROSENBAUGH MD
1810 WEALTHY ST SE
GRAND RAPIDS MICH 49506

JAMES A GUNN MD
1840 WEALTHY ST S E
GRAND RAPIDS MI 49506

ROBT E LEE GUNNING MD
369 GREENWICH RD NE
GRAND RAPIDS MI 49506

FAROUK A HABRA MD A
987 CALVARY NW
GRAND RAPIDS MI 49504

WILLIAM HAECK MD
21 MICHIGAN ST NE
GRAND RAPIDS MI 49503

DAVID L HAMMER MD
50 COLLEGE AVE SE
GRAND RAPIDS MI 49503

ARTHUR K HAMP MD
515 LAKESIDE DR SE
GRAND RAPIDS MI 49506

LAIRD E HAMSTRA MD
515 LAKESIDE DR S E
GRAND RAPIDS MI 49506

MARK P HARMELING MD
124 FULTON ST EAST
GRAND RAPIDS MI 49502

ROBERT W HARRISON MD
1810 WEALTHY ST SE
GRAND RAPIDS MI 49506

ROBERT E HAYES MD
456 CHERRY ST SE
GRAND RAPIDS MI 49503

THOMAS A HAYES MD A
2604 FABER CT
FALLS CHURCH VA 22046

THOS P HAYES MD
1840 WEALTHY ST S E
GRAND RAPIDS MI 49506

JOHN R HEATON MD A
2984 FOUNTAINHEAD RD
LARGO FLA 33540

DEWEY R HEETDERKS MD L
3413 BURTON RIDGE
GRAND RAPIDS MI 49506

D R HEETDERKS JR MD
21 MICHIGAN ST NE
GRAND RAPIDS MI 49502

LOUIS HELDER MD
1947 HUTCHINSON SE
GRAND RAPIDS MI 49506

CHRISTIAN HELMUS MD
203 PARIS AVE SE
GRAND RAPIDS MI 49503

RUTH HERRICK MD L
908 E MAIN ST
LOWELL MICHIGAN 49331

D W HESSELSCHWERDT MD
928 PRINCETON SE
GRAND RAPIDS MICH 49506

A MORGAN HILL MD
50 COLLEGE AVE SE
GRAND RAPIDS MI 49503

JACK W HILL MD
6850 DIVISION AVE S
GRAND RAPIDS MI 49508

C P HODGKINSON II MD
26 SHELDON AVE SE
GRAND RAPIDS MI 49502

RONALD A HOEKMAN MD A
960 LAKESIDE DR SE
GRAND RAPIDS MI 49506

ANDREW L HOEKSTRA MD
111 N KIDD
IONIA MI 48846

PHILIP J HOEKSTRA MD
909 FULTON ST E
GRAND RAPIDS MI 49503

ALBERTUS J HOFFS MD
2607 FREDERICKS DR SE
GRAND RAPIDS MI 49506

HENRY D HOLKEBOER MD A
251 CURLEW ST
FT MYERS FL 33931

STEPHEN HOLLANDER MD
1451 GRANDVILLE AVE
GRAND RAPIDS MI 49509

ROBERT S HOLM MD
515 LAKESIDE DR SE
GRAND RAPIDS MI 49506

JACK HOOGERHYDE MD
26 SHELDON AVE SE
GRAND RAPIDS MI 49502

DAVID J HORNING MD
26 SHELDON AVE SE
GRAND RAPIDS MI 49502

BRIAN L HOTCHKISS MD
515 LAKESIDE DR SE
GRAND RAPIDS MI 49506

CHARLES R HOWIE MD
255 WASHINGTON ST SE
GRAND RAPIDS MI 49502

ROBERT L HOYT MD
1810 WEALTHY ST SE
GRAND RAPIDS MI 49506

HARRY C HUDSON MD
50 COLLEGE AVE SE
GRAND RAPIDS MI 49503

A RAY HUFFORD MD L
455 CHERRY SE
GRAND RAPIDS MI 49502

JAMES C HUMPHREY MD
26 SHELDON AVE S E
GRAND RAPIDS MI 49502

MARILYN R HUNTER MD A
BOX 628
PORT AU PRINCE HAITI

F A HUTCHINSON MD
21 MICHIGAN ST NE #635
GRAND RAPIDS MICH 49502

ROBT H HYDRICK MD
1039 W FULTON
GRAND RAPIDS MICH 49504

JAMES R IRWIN MD
21 MICHIGAN NE
GRAND RAPIDS MI 49502

JERRY L IRWIN MD
26 SHELDON AVENUE SE
GRAND RAPIDS MI 49502

WM W JACK MD
1810 WEALTHY ST S E
GRAND RAPIDS MI 49506

FRED M JAMESON MD
833 LAKE DR SE
GRAND RAPIDS MI 49506

WALTER J JARACZ MD L
634 BRIDGE ST N W
GRAND RAPIDS MI 49504

WALTER J JARACZ JR MD
2410 GAYNOR AVE NW
GRAND RAPIDS MI 49504

ROBT W JARKA MD
50 COLLEGE AVE SE
GRAND RAPIDS MI 49503

CHAS JARVIS JR MD A
218 SLIGH BLVD NE
GRAND RAPIDS MI 49505

JANE J JAWAHIR MD
190 ROBINWOOD SE
GRAND RAPIDS MI 49506

VIVIAN P JAWAHIR MD
3181 PRAIRIE ST SW
GRANDVILLE MI 49418

WILLIAM B JENSEN JR MD
425 CHERRY SE
GRAND RAPIDS MICH 49502

DONALD C JOHNS MD
655 BROADVIEW ST S E
GRAND RAPIDS MI 49507

LARRY S JOHNSGARD MD
5726 RIDGEBROOK DR SE
GRAND RAPIDS MI 49506

TOM JOHNSON MD
201 LAFAYETTE AVE SE
GRAND RAPIDS MI 49503

DAN W JOHNSTON MD
2440 BEECHWOOD SE
GRAND RAPIDS MI 49506

WM L JOHNSTON MD
245 STATE ST SE
GRAND RAPIDS MI 49502

HAVEN E JONES MD
833 LAKE DR S E
GRAND RAPIDS MICH 49506

JOHN D L JUI MD
4234 LAKE MICH DR NW
GRAND RAPIDS MI 49504

ALEKSANDRS KALNINS MD A
1052 EASTERN AVE NE
GRAND RAPIDS MI 49503

L A KAMMERAAD MD
1810 WEALTHY ST SE
GRAND RAPIDS MICH 49506

PAUL E KASCHEL MD
1330 BRADFORD ST NE
GRAND RAPIDS MI 49503

DONALD E KELLEY MD
515 LAKESIDE DR SE
GRAND RAPIDS MI 49506

DAVID W KEMPERS MD
50 COLLEGE AVENUE SE
GRAND RAPIDS MICH 49503

ALBERT H KEMPTER MD
750 FULLER AVE SE
GRAND RAPIDS MI 49503

DALE L KESSLER MD
540 BELVEDERE DR SE
GRAND RAPIDS MI 49506

DONN W KETCHAM MD A
MEM CHRISTIAN HOSP
P O MALUMGHAT
D T CHITTAGONG
EAST PAKISTAN

YOUN S KIM MD
1810 WEALTHY ST SE
GRAND RAPIDS MI 49506

WILLIAM E KINCAID MD
100 MICHIGAN ST NE
GRAND RAPIDS MI 49503

JACOB E KLEIN MD M
RR 2 BOX 30
BANGOR MI 49013

THOMAS E KLEIN MD
21 MICHIGAN ST NE
GRAND RAPIDS MICH 49502

JAMES T KLOMPARENS MD
7050 ADA DR S E
GRAND RAPIDS MI 49506

PAUL W KNISKERN MD
26 SHELDON AVE S E
GRAND RAPIDS MI 49502

BERNARD P KOOL MD
445 CHERRY ST S E
GRAND RAPIDS MI 49503

BERT J KORHONEN MD
21 MICHIGAN ST NE
GRAND RAPIDS MI 49502

SYLVIA M KOSCIOLEK MD
201 LAFAYETTE AVE SE
GRAND RAPIDS MI 49503

HARM KRAAI MD A
1466 DERBYSHIRE S E
GRAND RAPIDS MI 49508

CHARLES F KRECKE MD
201 LAFAYETTE AVE SE
GRAND RAPIDS MICH 49503

HENRY J KREULEN MD
2135 ONEKEMA DR S E
GRAND RAPIDS MI 49506

RICHARD L KREUZER MD A
470 TUTTLE N E
GRAND RAPIDS MI 49503

FRANK J KRHOVSKY MD
153 LAFAYETTE AVE SE
GRAND RAPIDS MI 49503

WM T KRUSE JR MD A
3044 HALL ST S E
GRAND RAPIDS MI 49506

K V KUIPER MD
2208 MADISON AVE SE
GRAND RAPIDS MI 49507

WALTER W LAIDLAW MD
1840 WEALTHY ST SE
GRAND RAPIDS MI 49506

ROBT G LAIRD MD L
940 BELLCLAIR SE
GRAND RAPIDS MICH 49506

RUTH E LALIME MD
52 BURTON ST W
GRAND RAPIDS MI 49507

AUSTIN E LAMBERTS MD A
4300 WAIALAE AVE B-503
HONOLULU HAWAII 96816

RAMON B LANG MD
21 MICHIGAN ST NE
GRAND RAPIDS MI 49502

JOS H LEEP MD
1545 DIAMOND AVE NE
GRAND RAPIDS MI 49505

JOS R LENTINI MD
303 FULTON ST E
GRAND RAPIDS MI 49502

C A LEUZ 111 MD A
331 HOLMDENE BLVD N E
GRAND RAPIDS MI 49503

ROBERT S LEVINE MD
50 COLLEGE AVE SE
GRAND RAPIDS MI 49503

GEO H LEWIS MD
3181 PRAIRIE S W
GRANDVILLE MI 49418

HARRY LIEFFERS MD L
26 SHELDON AVE S E
GRAND RAPIDS MI 49502

WILLIAM T LINCER MD
833 LAKE DR S E
GRAND RAPIDS MI 49506

KENNETH E LOBBES MD
425 CHERRY ST S E
GRAND RAPIDS MI 49502

JAMES W LOGIE MD
RAMONA MEDICAL CENTER
GRAND RAPIDS MICH 49506

F RAYMER LOVELL JR MD
515 LAKESIDE DR SE
GRAND RAPIDS MI 49506

R J LOVETT JR MD A
1320 PLYMOUTH RD S E
GRAND RAPIDS MI 49506

JACK G LUKENS MD
245 STATE ST SE
GRAND RAPIDS MI 49502

DUGALD S MAC INTYRE MD
515 LAKESIDE DR SE
GRAND RAPIDS MI 49506

JAMES T MAHER MD
320 MEDICAL ARTS BLDG
GRAND RAPIDS MI 49502

JEROME F MANCEWICZ MD
1156 LEONARD ST NW
GRAND RAPIDS MICH 49504

JOS D MANN MD
100 MICHIGAN ST NE
GRAND RAPIDS MI 49503

JOSEPH B MARDGIL MD
21 MICHIGAN ST NE
GRAND RAPIDS MI 49502

JOHN P MARSH MD L
35 BEL AIR DR NE
GRAND RAPIDS MI 49503

STEPHEN K MARSH MD
6143 28TH ST SE
GRAND RAPIDS MI 49506

ROBERT B MARSHALL MD
100 MICHIGAN ST NE
GRAND RAPIDS MI 49503

MARTIN MARTINUS MD
750 FULLER AVENUE NE
GRAND RAPIDS MI 49503

JOHN A MARVIN MD
1425 MICHIGAN ST NE
GRAND RAPIDS MI 49503

WARREN B MASON MD
50 COLLEGE AVE SE
GRAND RAPIDS MI 49503

C J MATERNOWSKI MD
1425 MICHIGAN ST NE
GRAND RAPIDS MI 49503

RALPH E MATHIS MD
245 STATE ST SE
GRAND RAPIDS MI 49502

LELAND R MATTHEWS MD A
1509 ARDMORE S E
GRAND RAPIDS MI 49507

T C MAYCROFT MD
238 BRISTOL AVE NW
GRAND RAPIDS MI 49504

MASON S MAYNARD MD
445 CHERRY ST SE
GRAND RAPIDS MI 49503

W PATRICK MAZIER MD
72 SHELDON AVE SE
GRAND RAPIDS8 MI 49502

JOHN K MC CORMICK MD
122 CALEDONIA NE
GRAND RAPIDS MI 49505

WM J MC DOUGAL MD
1011 E FULTON ST
GRAND RAPIDS MI 49503

ORVAL I MC KAY MD
1150 N HUDSON ST
LOWELL MICH 49331

LELAND M MC KINLAY MD R
403 DIXIE DR SOUTH
HOWEY IN HILLS FL 32737

MYRTLE S MCLAIN MD
645 OAKLEIGH N W
GRAND RAPIDS MI 49504

RICHARD H MEADE JR MD A
750 SAN JOSE DRIVE
GRAND RAPIDS MI 49506

WALTER D MEESTER MD
1840 WEALTHY ST SE
GRAND RAPIDS MI 49506

GAYLE H MEHNEY M D
245 STATE ST SE
GRAND RAPIDS MI 49502

JUDITH L MEYER MD
1756 NEWARK AVE SE
GRAND RAPIDS MI 49507

JAMES A MILLARD MD
1553 BOSTON ST SE
GRAND RAPIDS MI 49507

J D MILLER MD
50 COLLEGE AVE SE
GRAND RAPIDS MI 49503

THEO P MILLER MD
833 LAKE DRIVE SE
GRAND RAPIDS MI 49506

CARL H MOBERG MD
21 MICHIGAN ST NE
GRAND RAPIDS MI 49502

CORNETTA G MOEN MD L
844 LEFFINGWELL RD NE
GRAND RAPIDS MI 49506

JOSEPH V MOLESKI M D
26 SHELDON AVE S E
GRAND RAPIDS MICH 49502

LEO T MOLESKI MD
26 SHELDON AVE S E
GRAND RAPIDS MICH 49502

STANLEY L MOLESKI MD A
1701 PONTIAC RD SE
GRAND RAPIDS MI 49506

ARTHUR M MOLL MD L
146 156 MONROE AVE NW
GRAND RAPIDS MI 49502

ARTHUR H MOLLMANN MD L
506 MULFORD DR SE
GRAND RAPIDS MI 49507

JOHN C MONTGOMERY MD
1810 WEALTHY ST S E
GRAND RAPIDS MI 49506

ODUGLAS P MOORE MD
515 LAKESIDE DR SE
GRAND RAPIDS MI 49506

JOSEPH S MOORE MD
21 MICHIGAN ST NE
GRAND RAPIDS MI 49502

E L MOORHEAD II MD
833 LAKE DR SE
GRAND RAPIDS MI 49506

DIRK R MOUW MD
1854 S DIVISION AVE
GRAND RAPIDS MI 49507

G ARTHUR MULDER MD
1414 EASTERN AVE SE
GRAND RAPIDS MI 49507

JAMES P MULDOON MD
72 SHELDON AVE SE
GRAND RAPIDS MICH 49502

MILES J MURPHY MD
1425 MICHIGAN ST NE
GRAND RAPIDS MI 49503

ROBT M NALBANDIAN MD
2812 OAKWOOD DR
E GRAND RAPIDS MI 49506

REINARD P NANZIG MD
1425 MICHIGAN ST NE
GRAND RAPIDS MI 49503

JOHN P NEWTON MD
1632 DIAMOND AVE NE
GRAND RAPIDS MI 49505

KENNETH C NICKEL MD
833 LAKE DRIVE SE
GRAND RAPIDS MICH 49506

MELVIN L NOAH MD
MIDDLEVILLE MI 49333

M SAMUEL NOORDHOFF MD A
92 N CHUNG SHAM SEC 2
TAIPEI TAIWAN

PETER B NORTHOUSE MD
26 SHELDON AVE S E
GRAND RAPIDS MI 49502

VICTOR A NOTIER MD
50 COLLEGE AVE SE
GRAND RAPIDS MI 49503

SAML M OATES MD
245 STATE ST SE
GRAND RAPIDS MI 49502

JAMES D O BRIEN MD
1156 LEONARD ST NW
GRAND RAPIDS MI 49504

WM G O DRISCOLL MD
515 LAKESIDE DR SE
GRAND RAPIDS MI 49502

RICHARD L ORDERS MD
255 WASHINGTON SE
GRAND RAPIDS MI 49502

RALPH W ORTWIG MD
1425 MICHIGAN ST NE
GRAND RAPIDS MI 49503

ERNEST L OVERBEEK M D
26 SHELDON AVE S E
GRAND RAPIDS MICH 49502

AVNI O OZKAN MD
1444 MICHIGAN NE
GRAND RAPIDS MI 49503

RUSSELL J PAALMAN MD
21 MICHIGAN ST NE
GRAND RAPIDS MI 49502

ROBERT H PAINTER MD
DEUR CLINIC
GRANT MI 49327

THERESA A PALASZEK MD
833 LAKE DR S E
GRAND RAPIDS MICH 49506

STEVEN S PALMER MD
515 LAKESIDE DR SE
GRAND RAPIDS MI 49506

JOHN P PAPP MD
515 LAKESIDE DR SE
GRAND RAPIDS MI 49506

WM J PASSINAULT MD
26 SHELDON AVE SE
GRAND RAPIDS MI 49502

MARSHALL PATTULLO MD
515 LAKESIDE DR SE
GRAND RAPIDS MI 49506

C ALLEN PAYNE MD L
1840 WEALTHY ST
GRAND RAPIDS MICH 49506

JOHN R PEDDEN MD
445 CHERRY ST S E
GRAND RAPIDS MI 49503

JOHN C PEIRCE MD
201 LAFAYETTE AVE SE
GRAND RAPIDS MI 49503

WARREN C PILLING MD
833 LAKE DR SE
GRAND RAPIDS MI 49506

M S PISKIN MD
1077 LEONARD ST NE
GRAND RAPIDS MI 49503

JOHANNES D PLEKKER MD
833 LAKE DR SE
GRAND RAPIDS MI 49506

LEE R POOL MD
245 STATE ST SE
GRAND RAPIDS MI 49502

HOWARD P PORTER JR MD
2743 DE HOOP ST SW
GRAND RAPIDS MI 49509

ALBERT E POSTHUMA MD
153 LAFAYETTE SE
GRAND RAPIDS MI 49503

EDWARD Y POSTMA MD
21 MICHIGAN ST NE
GRAND RAPIDS MI 49502

HOWARD F POSTMA MD
3860 CHICAGO DR SW
GRANDVILLE MICH 49418

E JAMES POTCHEN MD A
E MALLINCKRODT
INST OF RADIOLOGY
510 KINGSHIGHWAY
ST LOUIS MO 63110

ABRAHAM L POTT MD L
1011 FULTON ST E
GRAND RAPIDS MI 49503

WINSTON B PROTHRO MD
1619 WALKER ST NW
GRAND RAPIDS MI 49504

ROBERT H PUITE MD
515 LAKESIDE DR SE
GRAND RAPIDS MI 49506

LEONARD L RADECKI MD A
TAC HOSPITAL
FORBES AFB KS 66620

ROBERT J RAIMAN MD
50 COLLEGE AVE SE
GRAND RAPIDS MICH 49503

L PAUL RALPH MD
5075 EGYPT VALLEY N E
BELMONT MI 49306

RICHARD A RASMUSSEN MD
BLODGETT MED BLDG
GRAND RAPIDS MI 49501

D F REARDON MD
1168 NIXON NW
GRAND RAPIDS MI 49504

WM F REUS JR MD
153 LAFAYETTE AVE SE
GRAND RAPIDS MI 49503

MOHAMMAD RIAHI MD
456 CHERRY ST SE
GRAND RAPIDS MI 49506

ROBERT E RIBBE MD
124 FULTON ST E
GRAND RAPIDS MI 49502

ROBERT K RICHMOND MD
24 BURTON ST SE
GRAND RAPIDS MI 49507

JAMES M RIEKSE MD
21 MICHIGAN ST NE
GRAND RAPIDS MI 49502

JOHN C RIENSTRA MD
833 LAKE DR SE
GRAND RAPIDS MI 49506

J C RINGENBERG MD
1425 MICHIGAN ST NE
GRAND RAPIDS MI 49503

CHAS S ROBB MD
445 CHERRY ST SE
GRAND RAPIDS MI 49503

JOHN H ROBBERT MD
2911 TIMBER LANE
GRANDVILLE MI 49418

WM G ROBINSON MD
6850 DIVISION AVE SO
GRAND RAPIDS MI 49508

LARRY J ROBSON MD
1810 WEALTHY ST SE
GRAND RAPIDS MI 49506

WM L RODGERS MD
2865 LAKE DR SE
GRAND RAPIDS MICH 49506

LUIS R RODRIGUEZ MD
50 COLLEGE AVE SE
GRAND RAPIDS MI 49503

LELAND E ROGGE MD A
2326 BURCHARD SE
GRAND RAPIDS MI 49506

JACK L ROMENCE MD
21 MICHIGAN ST NE
GRAND RAPIDS MI 49502

WENDELL H ROOKS MD
1339 PLAINFIELD NE
GRAND RAPIDS MICH 49505

WILLIAM ROSENBERG MD
550 CHERRY ST SE
GRAND RAPIDS MICH 49502

LEONARD ROSENZWEIG MD
515 LAKESIDE DR SE
GRAND RAPIDS MI 49506

EMIL M ROTH MD A
202 S W 63RD AVE
PLANTATION FL 33314

O W ROTTSCHAFER MD
50 COLLEGE AVE SE
GRAND RAPIDS MI 49503

JOHN A RUPKE MD
324 FOREST HILL DR SE
GRAND RAPIDS MICH 49506

THEO J RUPP MD
20441 DANBURY LN
HARPER WOODS MI 48225

JOHN A RYAN MD
153 LAFAYETTE SE
GRAND RAPIDS MI 49503

JAMES SCHARPHORN MD
P O BOX 174
GRANDVILLE MI 49418

HOWARD J SCHAUBEL MD
124 FULTON ST E
GRAND RAPIDS MI 49502

DONALD C SCHEK MD
2749 CLYDE PARK SW
GRAND RAPIDS MI 49508

L J SCHERMERHORN MD R
2317 VINE HILL RD
SANTA CRUZ CA 95062

RALPH J SCHLOSSER M D
456 CHERRY ST SE
GRAND RAPIDS MI 49503

GEO R SCHNEIDER MD
1810 WEALTHY ST SE
GRAND RAPIDS MI 49506

ELMER W SCHNOOR MD L
844 IROQUOIS DRIVE S E
GRAND RAPIDS MI 49506

LOUISE F SCHNUTE MD
146 MONROE N W
GRAND RAPIDS MI 49502

PAUL G SCHUTT MD
21 MICHIGAN ST NE
GRAND RAPIDS MI 49502

THOS G SCHWADERER MD
21 MICHIGAN ST NE
GRAND RAPIDS MI 49502

WM B SCOTT MD
26 SHELDON AVE SE
GRAND RAPIDS MI 49502

ALISON W SCRIMGEOUR A
2260 NELSON SE APT C
GRAND RAPIDS MI 49507

RAYMOND E SCULLEY MD
20 BURTON ST S E
GRAND RAPIDS MICH 49507

J A SENTKERESTY MD
515 LAKESIDE DR SE
GRAND RAPIDS MI 49506

C A SETTERSTROM MD
734 ALGER ST S E
GRAND RAPIDS MI 49507

EUGENE S SEVENSMA MD
124 FULTON ST EAST
GRAND RAPIDS MI 49502

MARTIN SHARDA M D
300 36TH ST SW
GMC PLANT #1
GRAND RAPIDS MICH 49508

ROBERT B SHARP MD
833 LAKE DR SE
GRAND RAPIDS MI 49506

RICHARD H SIDELL MD
515 LAKESIDE DR S E
GRAND RAPIDS MI 49506

BERNARD H SIEBERS MD
P O BOX 6189
GRAND RAPIDS MI 49506

ALAN E SIEGEL MD
1810 WEALTHY ST S E
GRAND RAPIDS MI 49506

WILLIAM D SIMPSON MD
2777 NIPAWIN CT NE
GRAND RAPIDS MI 49505

JOHN S SLUYTER MD
750 FULLER AVE N E
GRAND RAPIDS MI 49503

DEAN B SMITH MD
4236 KALAMAZOO SE
GRAND RAPIDS MI 49508

DEAN T SMITH MD A
2111 EASTERN AVE NE
GRAND RAPIDS MI 49505

JOHN H SMITH MD
1840 WEALTHY ST SE
GRAND RAPIDS MI 49506

ROBT B SMITH MD
26 SHELDON AVE SE
GRAND RAPIDS MI 49502

ROLAND G SNEARLY MD A
BP13 BAPTIST MISSION
KOUMRA REPUBLIQUE
DU TCHAD AFRICA

JOHN D SNIDER MD
1827 ARGENTINA DR SE
GRAND RAPIDS MICH 49506

CLARENCE A SNYDER MD A
KIBAGORA MISSION HOSP
B P 31
CYANGUGU RWANDA
AFRICA

T H SOUTHWELL MD
21 MICHIGAN ST NE
GRAND RAPIDS MI 49502

C H SOUTHWICK MD
515 LAKESIDE DR SE
GRAND RAPIDS MI 49506

G HOWARD SOUTHWICK MD L
515 LAKESIDE SE
GRAND RAPIDS MI 49506

WM E SPRAGUE MD
2150 LK MICHIGAN DR NW
GRAND RAPIDS MI 49504

MAJ WILLARD S STAWSKI A
LUKE AFB HOSPITAL
SURGEON TAC
LUKE AFB ARIZONA 85301

W H STEFFENSEN MD
1061 SANTA BARBARA SE
GRAND RAPIDS MICH 49506

GARNET G STONEHOUSE MD R
408 MEDICAL ARTS BLDG
GRAND RAPIDS MI 49502

FERNLEY STONEMAN MD
3181 PRAIRIE ST SW
GRANDVILLE MI 49418

VIRGIL E STOVER MD
545 LAKESIDE DR SE
GRAND RAPIDS MI 49506

LEROY E STRONG MD
515 LAKESIDE DR SE
GRAND RAPIDS MI 49506

CULLEN E SUGG MD L
3175 CASCADE RD SE
GRAND RAPIDS MI 49506

TETSUO SUGIYAMA MD
26 SHELDON AVENUE SE
GRAND RAPIDS MI 49502

KEH MING SUN MD
ST MARYS HOSP LAB
GRAND RAPIDS MI 49503

JEROME W SWAN MD
21 MICHIGAN ST NE
GRAND RAPIDS MI 49502

ALFRED B SWANSON MD
1810 WEALTHY ST S E
GRAND RAPIDS MI 49506

HAROLD C SWENSON MD
124 FULTON ST E
GRAND RAPIDS MI 49502

T M TALBOTT MD
1407 TREMONT NW
GRAND RAPIDS MI 49504

JOSEPH L TAYLOR MD
1033 FULTON ST W
GRAND RAPIDS MI 49504

DONALD H TER KEURST MD
2740 EASTERN AVE SE
GRAND RAPIDS MI 49507

ARTHUR J TESSEINE MD
3000 MONROE AVE NW
GRAND RAPIDS MI 49505

PAUL G THEODORE MD
21 MICHIGAN ST NE
GRAND RAPIDS MI 49502

ATHOL B THOMPSON MD L
1857 GOLDEN RAIN RD #2
WALNUT CREEK CA 94595

EDWARD C THOMPSON MD
1401 BRETON RD SE
GRAND RAPIDS MI 49506

FRANK O THOMPSON MD
2008 EL DORADO DR SE
EAST GRAND RAPIDS MI 49506

JOS C TIFFANY MD
502 MEDICAL ARTS BLDG
GRAND RAPIDS MI 49501

LUIS A TOMATIS MD
456 CHERRY ST SE
GRAND RAPIDS MI 49503

WM R TORGERSON MD L
515 LAKESIDE DR S E
GRAND RAPIDS MI 49506

JACK H TOWNSEND MD
515 LAKESIDE DR SE
GRAND RAPIDS MI 49506

ROBT L TROSKE MD
534 DOGWOOD DR NE
ADA MI 49301

CLARENCE P TRUOG MD L
833 LAKE DR S E
GRAND RAPIDS MI 49506

V J TURCOTTE JR MD
515 LAKESIDE DR SE
GRAND RAPIDS MI 49506

VERNON D VAANDRAGER MD
21 MICHIGAN ST NE
GRAND RAPIDS MI 49502

F VALDMANIS MD
2120 LAKE DR SE
GRAND RAPIDS MI 49506

RAYMOND S VAN BREE MD
812 ROSALIE NW
GRAND RAPIDS MI 49504

FORREST R VAN DAM MD
1810 WEALTHY ST SE
GRAND RAPIDS MICH 49506

A R VANDEN BERG MD
833 LAKE DR SE
GRAND RAPIDS MI 49506

WM VANDENBERG MD
124 FULTON ST E
GRAND RAPIDS MICH 49502

WM O VANDEN BERG MD
50 COLLEGE AVE SE
GRAND RAPIDS MI 49503

H L VANDER KOLK MD
611 ROSEWOOD AVE SE
GRAND RAPIDS MI 49506

K J VANDER KOLK MD
21 MICHIGAN ST NE
GRAND RAPIDS MI 49502

RAYMOND VANDER MEER MD
26 SHELDON AVE S E
GRAND RAPIDS MI 49502

JOHN VANDERMOLEN MD
124 FULTON ST E
GRAND RAPIDS MI 49502

R A VANDER PLOEG MD
26 SHELDON AVE SE
GRAND RAPIDS MICH 49502

WM H VANDER PLOEG MD
833 LAKE DR SE
GRAND RAPIDS MI 49506

C G VANDERVEER MD
21 MICHIGAN ST NE
GRAND RAPIDS MI 49502

G M VAN DOMMELEN MD
21 MICHIGAN ST NE
GRAND RAPIDS MI 49502

HENRY J VAN DUINE MD
153 LAFAYETTE SE
GRAND RAPIDS MI 49503

HAROLD E VAN DYKE MD
1425 MICHIGAN ST NE
GRAND RAPIDS MICH 49503

KORNELIUS VAN GOOR MD
26 SHELDON AVE S E
GRAND RAPIDS MI 49502

CORNELIS VAN NUIS MD
245 STATE ST SE
GRAND RAPIDS MI 49502

G F VAN OTTEREN MD
21 MICHIGAN ST NE
GRAND RAPIDS MI 49502

PAUL VAN PORTFLIET MD
245 STATE ST SE
GRAND RAPIDS MI 49502

ALBERT VAN T HOF MD
50 COLLEGE AVE SE
GRAND RAPIDS MI 49503

PETER O VAN VLIET MD
100 MICHIGAN ST N E
GRAND RAPIDS MI 49503

B R VAN ZWALENBURG MD
2116 CORONADO DR SE
GRAND RAPIDS MI 49506

C MARK VASU MD
1425 MICHIGAN AVE
GRAND RAPIDS MI 49503

HAROLD E VELDMAN MD L
21 MICHIGAN ST NE
GRAND RAPIDS MI 49502

JAY H VELTMAN MD
3946 G 30TH ST
GRANDVILLE MICHIGAN 49418

JAY R VENEMA MD
540 OVERBROOK LANE S E
GRAND RAPIDS MI 49507

GLENN P VERBRUGGE MD A
468 TUTTLE AVE N E
GRAND RAPIDS MI 49503

PETER VER MEULEN MD A
105 BAYNTON N E
GRAND RAPIDS MI 49503

A L HUBERT VERWYS MD
815 ALGER ST S E
GRAND RAPIDS MI 49507

KEATS K VINING JR MD
515 LAKESIDE DR SE
GRAND RAPIDS MICH 49506

H C VISSCHER MD
515 LAKESIDE DR SE
GRAND RAPIDS MI 49506

ROBERT O VISSCHER MD
515 LAKESIDE DRIVE SE
GRAND RAPIDS MI 49506

EARL R VISSER MD
530 OVERBROOK LANE SE
GRAND RAPIDS MI 49507

ANTON VOGEL MD
1204 MADISON AVE S E
GRAND RAPIDS MICH 49507

JAMES S VOLKEL MD
833 LAKE DRIVE SE
GRAND RAPIDS MI 49506

JOHN A VOSS MD
2410 GAYNOR AVE NW
GRAND RAPIDS MI 49504

JOHN VROON MD
50 COLLEGE AVE SE
GRAND RAPIDS MI 49503

JAY D VYN MD L
7119 DRIFTWOOD S E
GRAND RAPIDS MI 49506

T G WADSWORTH FRCS
1810 WEALTHY ST S E
GRAND RAPIDS MI 49506

ELMER F WAHBY MD
100 MICHIGAN ST NE
GRAND RAPIDS MI 49503

TED J WALLER MD A
3025 PORTALES DR
FORT WORTH TEXAS 76116

DANIEL WALMA MD
745 TOWERS MED BLDG
GRAND RAPIDS MI 49503

LLOYD A WALWYN MD A
1147 COOPER ST S E
GRAND RAPIDS MI 49507

MARY GRACE W-DUNLOP MD A
1840 WEALTHY ST SE
GRAND RAPIDS MI 49506

ROGER N WASSINK MD
21 MICHIGAN ST NE
GRAND RAPIDS MI 49502

DONALD F WATERMAN MD
515 LAKESIDE DR SE
GRAND RAPIDS MICH 49506

JAMES K WATKINS MD
26 SHELDON AVE SE
GRAND RAPIDS MI 49502

P L WATTERSON MD A
2110 EDGEWOOD S E
GRAND RAPIDS MI 49506

CLARENCE F WEBB MD
833 LAKE DR S E
GRAND RAPIDS MI 49503

JEROME E WEBBER MD
50 COLLEGE AVE SE
GRAND RAPIDS MI 49503

THOMAS A WEEBER MD
3181 PRAIRIE S W
GRANDVILLE MICH 49418

R A WEHRENBERG MD
833 LAKE DR SE
GRAND RAPIDS MI 49506

JACK E WEIGLE MD
3860 CHICAGO DR SW
GRANDVILLE MI 49418

KEITH E WELLER MD
1200 LAKE DRIVE S E
GRAND RAPIDS MI 49506

VERNON E WENDT MD
937 FULTON ST W
GRAND RAPIDS MI 49504

ROBERT J WESTERHOFF MD
808 ALGER ST SE
GRAND RAPIDS MICH 49507

JOS F WHINERY MD
50 COLLEGE AVE SE
GRAND RAPIDS MI 49503

JOHN O WHITEHOUSE MD
1201 COLORADO AVE S E
GRAND RAPIDS MI 49506

R N WHITTENBERGER M D
21 MICHIGAN ST NE
GRAND RAPIDS MI 49502

JOHN L WIESE MD
50 COLLEGE AVE SE
GRAND RAPIDS MI 49503

REX G WILCOX MD A
726 CASS ST
MONTEREY CA 93940

MORRIS WILDEROM MD R
6495 TWO MILE RD
ADA MI 49301

JOHN B WILKES MD
833 LAKE DR SE
GRAND RAPIDS MI 49506

C A WILKINSON MD
1745 VESTA LANE SE
GRAND RAPIDS MICH 49506

HARVEY S WILKS MD A
109 BEE ST-VA HOSP
CHARLESTON S C 29403

JOHN R WILLIAMS MD
833 LAKE DR SE
GRAND RAPIDS MICH 49506

JOHN R WILSON MD
1085 E LEONARD ST
GRAND RAPIDS MI 49503

ROBERT J WILSON MD
1085 LEONARD ST N E
GRAND RAPIDS MI 49503

GARRETT E WINTER MD
1967 GODFREY AVE S W
GRAND RAPIDS MI 49509

JEROME J WISNESKI MD
26 SHELDON AVE S E
GRAND RAPIDS MI 49502

DONALD O WORCESTER MD
50 COLLEGE AVE SE
GRAND RAPIDS MI 49503

THOS B WRIGHT MD A
2614 PLAINFIELD AVE NE
GRAND RAPIDS MI 49505

JOHN F WURZ MD
201 NORWOOD AVE S E
GRAND RAPIDS MI 49506

MARTIN K WYNGAARDEN MD
245 STATE ST SE
GRAND RAPIDS MI 49503

JEROME A YARED MD
651 CHERRY ST SE
GRAND RAPIDS MI 49506

WILLIAM G YOST JR MD
50 COLLEGE AVE SE
GRAND RAPIDS MI 49503

DONALD G YOUNG MD
100 MICHIGAN ST N E
GRAND RAPIDS MICH 49503

Z ZADVINSKIS MD
833 LAKE DR SE
GRAND RAPIDS MI 49506

WM G ZIMMERMAN MD
435 CHERRY SE
GRAND RAPIDS MI 49502

GLENN A ZIMMERMANN MD
100 MICHIGAN ST NE
GRAND RAPIDS MI 49503

LAPEER

ANTHONY M ABRUZZO MD
1568 RULANE DR
LAPEER MICHIGAN 48446

ISAK O BERKER MD
912 N STATE ST
DAVISON MICHIGAN 48423

G CLARE BISHOP MD L

ALMONT MICH 48003

LEON R BORUCH MD
834 LIBERTY ST
LAPEER MICH 48446

CHAS E CONAWAY MD
1257 N MAIN ST
LAPEER MICHIGAN 48446

JAMES R DOTY MD
315 CLAY ST
LAPEER MICH 48446

CORNELL GREAVU JR MD
NORTH BRANCH MICH 48461

M BENNET HANEY MD
145 N MAIN ST
ALMONT MICHIGAN 48003

WM C HEITSCH MD
3257 DAVISON RD
LAPEER MI 48446

CLIFFORD HOUSE MD
1750 GREY RD
LAPEER MICH 48446

E G KIEHLER II MD
3257 DAVISON RD
LAPEER MI 48446

LUBOMIRA KOCUR MD
DRAWER A
LAPEER MICH 48446

EMIL LEBEODVYCH MD L
6457 LOTUS COURT
WATERFORD MI 48095

KSENIA LEBEDOVYCH MD R
6457 LOTUS COURT
WATERFORD MI 48095

DOROTHY L LEITH MD
240 MAIN ST
IMLAY CITY MICH 48444

STANLEY M LYNK MD
4589 LIPPINCOTT
LAPEER MICHIGAN 48446

ELLEN SMITH MD A
400 WHITE RD R 1
COLUMBIAVILLE MI 48421

GLENN L SMITH MD
6552 IMLAY CITY RD
IMLAY CITY MICH 48444

VINCENTE UY MD A
1218 OREGON ST
LAPEER MI 48446

H R ZEMMER MD
N MAIN ST
LAPEER MI 48446

CARL R ZOLLIKER MD R
2255 BETHEL BLVD
BOCA RATON FL 33432

LENAWEE

RUSSELL A ALLEN MD
689 STOCKFORD DR
ADRIAN MICHIGAN 49221

HERMINIO ARMOVIT MD
236 S FOURTH ST
ONSTED MICHIGAN 49265

JOSEPH F BACHMAN MD
SCOTT & WHITE CLINIC
TEMPLE TEXAS 78210

F W BALICE MD
128 E BUTLER ST
ADRIAN MICHIGAN 49221

LEONARDO BAYLON MD
693 STOCKFORD
ADRIAN MI 49221

WILFRIDO L BAYLON MD
693 STOCKFORD
ADRIAN MI 49221

CARL A BENZ MD
308 N BROAD ST
ADRIAN MICH 49221

JOHN BERGHUIS M D
225 RIVERSIDE AVE
ADRIAN MICHIGAN 49221

LOWELL E BLANCHARD MD
HUDSON MI 49247

MERWIN R BLANDEN MD
TECUMSEH MI 49286

B G BUENAFLORE MD
10 CAIRNS
TECUMSEH MI 49286

F F BUENAFLORE MD
10 CAIRNS
TECUMSEH MI 49286

LARRY T BURCH MD A
610 W POTTAWATAMIE ST
TECUMSEH MI 49286

RICHARD D COAK MD
308 W CHICAGO BLVD
TECUMSEH MICH 49286

EDWARD D CONNER MD
3 SCOTT COURT
ADRIAN MI 49221

CARLTON L COOK MD
603 E POTTAWATAMIE
TECUMSEH MICH 49286

R A DICCION MD
W MAIN ST
MORENCI MI 49256

HARRY M DICKMAN MD
104 OAK ST
HUDSON MICHIGAN 49247

E J DRANGINIS MD
HERRICK MEM HOSP
TECUMSEH MI 49286

RICHARD E DUSTIN MD
103 W BROWN ST
TECUMSEH MICH 49286

HOWARD R C EDDY MD
MILL RD
ADRIAN MICH 49221

FERENC FABOK MD
602 E POTTAWATAMIE ST
TECUMSEH MI 49286

JAMES L FEENEY MD
MILL ST
ADRIAN MICHIGAN 49221

M GALLIANI MD
4410 EVERGREEN DR
ADRIAN MICHIGAN 49221

RICHARD H GASCOIGNE MD
225 RIVERSIDE AVE
ADRIAN MI 49221

WILLIAM C GILKEY MD
227 RIVERSIDE DR
ADRIAN MICH 49221

RICHARD GILMARTIN MD
MILL ST
ADRIAN MICH 49221

ROBERT A GREINER MD
PROFESSIONAL BLDG
ADRIAN MICHIGAN 49221

JOHN HAMILTON MD
MILL ST
ADRIAN MICHIGAN 49221

GORDON HAMMERSLEY MD
1361 OREGON RD
ADRIAN MICHIGAN 49221

ROBT E HARRISON MD
410 BRENDT COURT
BLISSFIELD MICH 49228

CHAS H HEFFRON MD
231 N MAIN ST
ADRIAN MICH 49221

HOWARD H HEFFRON MD
231 N MAIN ST
ADRIAN MICH 49221

C HAROLD HEFFRON MD L
231 N MAIN ST
ADRIAN MI 49221

RALPH F HELZERMAN MD
112 S OTTAWA ST
TECUMSEH MICH 49286

WM H HEWES MD A
YPSILANTI STATE HOSP
YPSILANTI MI 48197

ROY A HIGHSMITH MD
113 W FRONT ST
ADRIAN MI 49221

PHILIP HUNT MD
MILL ST
ADRIAN MI 49221

WILLIAM T KELLY MD
755 HIGH ST
ADRIAN MI 49221

FRANCIS A LOCKE MD
755 HIGH ST
ADRIAN MICHIGAN 49221

A Q LUZ-PINEDA MD
MILL STREET
ADRIAN MI 49221

P LYNFORD MILLER MD R
BOX 38
ADRIAN MI 49221

ELLI MOELLER-FABOK MD
602 E POTTAWATAMIE ST
TECUMSEH MI 49286

HAROLD D OCAMB MD
600 E POTTAWATAMIE
TECUMSEH MICH 49286

EDUARDO ORTIZ MD
227 RIVERSIDE DR
ADRIAN MI 49221

DONALD A PARKER MD
BIXBY HOSPITAL
ADRIAN MICH 49221

BERNARD PATMOS MD
127 E MAUMEE ST
ADRIAN MICH 49221

CONRAD L PICKETT MD
220 E BUTLER
ADRIAN MI 49221

WM P PURFIELD MD
MANCHESTER MI 48158

BERT R RICHEY MD
765 MANITOU RD
MANITOU BEACH MICH 49253

J Y SAMSON MD
310 E MAUMEE
ADRIAN MI 49221

SERAFIN L SAMSON MD
160 PARK ST
ADRIAN MI 49221

DONATO F SARAPU MD
MILL ST
ADRIAN MICHIGAN 49221

ELEANOR P SKUFIS MD
201 ORCHARD RD
ADRIAN MICHIGAN 49221

XENOPHON SKUFIS MD
123 E CHESTNUT
ADRIAN MICH 49221

LANDIS C STEWART MD
750 HIGH ST
ADRIAN MICH 49221

RICHARD L TAYLOR MD
2550 N ADRIAN RD
ADRIAN MI 49221

CHAD A VAN DUSEN MD L
ROUTE #2
BLISSFIELD MI 49228

PATRICIA WENTZ MD
760 RIVERSIDE
ADRIAN MICHIGAN 49221

KEITH H WHITEHOUSE MD
MORENCI MI 49256

GEO C WILSON MD
BOX 224
CLINTON MICH 49236

MARVIN B WOLF MD
225 RIVERSIDE AVE
ADRIAN MICH 49221

GEO H WYNN MD
1115 W MAUMEE
ADRIAN MICH 49221

LIVINGSTON

THOS A BARTON MD
116 N MICHIGAN
HOWELL MICH 48843

JOHN H BETHEA MD
12851 E GR RIVER AVE
BRIGHTON MI 48116

FRANK J DETTERBECK MD
HOWELL STATE HOSPITAL
HOWELL MI 48843

RAY M DUFFY MD L
600 ILLINOIS
HOWELL MI 48843

KAROL GRANOWSKI MD
MCPHERSON COMM HLT CTR
HOWELL MICHIGAN 48843

R FRED HAUER MD
FOWLERVILLE MI 48836

THOMAS F HIGBY MD
FOWLERVILLE MICHIGAN 48836

HAROLD C HILL MD
116 N MICHIGAN AVE
HOWELL MICH 48843

STANLEY L HOFFMAN MD
1200 BYRON ROAD
HOWELL MICHIGAN 48843

PETER A LANGE MD
HOWELL STATE HOSPITAL
HOWELL MI 48843

LOUIS E MAY MD
CITY ROUTE 4
HOWELL MICH 48843

FLORENCE J C PERRY MD
1161 FOX HILLS DR
HOWELL MI 48843

R W PHILLIPS MD
HAMBURG MICHIGAN 48139

PHILLIP E SCHMITT MD
515 SO TOMPKINS
HOWELL MI 48843

LUKE H C SHENG MD
111 W GRAND RIVER AVE
BRIGHTON MI 48116

ROSCOE V STUBER MD
1200 BYRON RD
HOWELL MICHIGAN 48843

ENOS G WALKER MD L
4485 CORDLEY LAKE
LAKELAND MICH 48143

STELLA K C WANG MD
111 GRAND RIVER
BRIGHTON MICHIGAN 48116

EDWIN S WOODWORTH MD
1200 BYRON RD
HOWELL MICHIGAN 48843

LUCE

DONALD K BARSTOW MD

ENGADINE MI 49827

EDWARD C DALE MD
BOX 9
NEWBERRY MI 49868

ROBERT D GIBSON MD
804 NEWBERRY AVE
NEWBERRY MI 49868

ROBERT E GIBSON MD
207 W JOHN ST
NEWBERRY MICH 49868

R P HICKS MD
210 W JOHN ST
NEWBERRY MICH 49868

B G KEIZER MD
NEWBERRY STATE HOSP
NEWBERRY MICHIGAN 49868

WM R PURMORT JR MD
CAMARILLO STATE HOSP
CAMARILLO CA 93010

THOS W THOMPSON MD L
ROUTE 2 BOX 691M
TRAVERSE CITY 49684

MACOMB

JUAN E ALEJOS MD
11885 E 12 MILE #102
WARREN MI 48093

JAMES H ALEXANDER MD
25815 HARPER
ST CLAIR SHORES MI 48081

MERCEDES ALVAREZ MD
28532 SCHOENHERR RD
WARREN MI 48093

ROBT H AMBROSE MD
18801 E TEN MILE RD
ROSEVILLE MICH 48066

MIGUEL A ARELLANO MD
21500 MOUND RD
WARREN MICHIGAN 48091

F E AUDRETSCH MD
355 LINCOLN
GROSSE PTE MI 48230

FRED AVERBUCH MD
11885 E 12 MILE RD
WARREN MI 48093

OPHELIA P BAKER MD
8783 BRUCE COLLINS CT
STERLING HEIGHTS MI 48077

HECTOR A BALEIRON MD
263 S GRATIOT
MT CLEMENS MI 48043

JOHN G BARKER MD
8050 WARREN BLVD
CENTER LINE MICH 48015

ALVIN J BEECHER M D
21501 KELLY
EAST DETROIT MICH 48021

BERNARD BIGLEY MD
35992 GRATIOT
MT CLEMENS MICHIGAN 48043

FRANK J BILUK MD
GM TECH CENTER
12 MILE & MOUND RD

WARREN MICH 48090

YOUSEF B BISMAI MD
28043 HOOVER
WARREN MICHIGAN 48093

DONALD G BLAIN MD
198 S GRATIOT
MT CLEMENS MI 48043

LELAND C BROWN MD
21536 PARKWAY
ST CLAIR SHORES MICH 48082

G C BRUECKNER MD
ST JOSEPH HOSPITAL
MT CLEMENS MI 48043

JAMES W BRYCE MD
24735 VAN DYKE
CENTERLINE MI 48015

CARLOS J BULCOURF MD
31170 HOOVER RD
WARREN MI 48093

W B CARRUTHERS MD
198 S GRATIOT
MT CLEMENS MI 48043

JOSE L CHALELA MD
122 W WASHINGTON AVE
ROMEO MI 48065

HAROLD P CHARBENEAU MD
229 S GRATIOT
MT CLEMENS MICH 48043

LUIS M CHARBONIER MD
28532 SCHOENHERR
WARREN MICHIGAN 48093

JOEL W CLAY MD
263 S GRATIOT AVE
MT CLEMENS MICHIGAN 48043

ALBERTO COHEN MD
25705 STONEYCROFT DR
SOUTHFIELD MICHIGAN 48075

ALAN COHEN MD
12500 TWELVE MILE RD
WARREN MICHIGAN 48093

CELAL COLAKOGLU MD
46056 CASS
UTICA MI 48087

SORAB A COLAH MD
708 MONITOR LEADER BL
MT CLEMENS MICHIGAN 48043

DAVID COLLON DDS A
MACOMB DAILY BLDG
MT CLEMENS MI 48043

JOHN CORBETT MD
225 S GRATIOT
MT CLEMENS MICHIGAN 48043

JOSE COSIO MD
ST JOSEPH HOSPITAL
MT CLEMENS MICH 48043

JOS M CROMAN JR MD R
131 MARKET ST
MT CLEMENS MI 48043

VICTOR CURATOLO MD
67 CASS AVE
MOUNT CLEMENS MICH 48043

BERNARDO M DANAN MD
28043 HOOVER RD
WARREN MI 48093

H B DARIAN MD
2151 LIVERNOIS
TROY MI 48084

E DEOCAMPO MD
20720 MAXINE
ST CLAIR SHORES MI 48080

NESTOR D DEOCAMPO MD
28043 HOOVER
WARREN MI 48093

DARIO C DEPAULIS MD
22770 KELLY
EAST DETROIT MICH 48021

POLIBIO A DILONE MD
493 W GRAND BLVD
DETROIT MI 48216

PAUL DIONNE MD
8216 E 12 MILE RD
WARREN MI 48093

EDMUND J DUDZINSKI MD
43533 ELIZABETH RD
MT CLEMENS MI 48043

CHARLES M EBNER MD
12296 TWELVE MILE RD
WARREN MI 48093

SEYMOUR B EKELMAN MD
14 BELLEVIEW
MT CLEMENS MICHIGAN 48043

ELMER P ELLIAS MD
23700 VAN DYKE
WARREN MICH 48089

JOHN A ENGELS MD
69311 N MAIN
RICHMOND MICH 48062

THOMAS B EYL MD
815 BROWN ST
ST CLAIR MI 48079

JERRY S FAGELMAN MD
1514 HOUNDS CHASE
TROY MI 48084

JOHN M FEILLA MD
21811 KELLY RD
EAST DETROIT MI 48021

JAMES WM FINN MD
46056 CASS
UTICA MICHIGAN 48087

LAWRENCE W FRENCH MD
25815 HARPER
ST CLAIR SHORES MI 48081

HERBERT F FRIEDMAN MD
11885 E 12 MILE RD#203
WARREN MI 48093

ANDREW A FULGENZI MD
17301 E EIGHT MILE RD
EAST DETROIT MI 48021

FRANCIS S GERBASI MD
81 LOCHMOOR BLVD
GROSSE PTE SHORES MI 48236

CARLOS B GAYLES MD
122 WASHINGTON
ROMEO MI 48065

MORRIS I GOLDIN MD
6902 CHICAGO RD
WARREN MICH 48092

BERNARD J GOLDMAN MD
243 S GRATIOT AVE
MT CLEMENS MICH 48043

C G GONZALEZ MD
20 PARKVIEW
ST JOSEPH HOSP

MT CLEMENS MI 48043

SEYMOUR V GORDON MD
13500 E 12 MILE RD
WARREN MI 48093

WALTER GUEVARA MD
67 CASS AVE
MT CLEMENS MI 48043

MICHAEL HAAS MD
20867 MACK AVE
GROSSE PTE WDS MI 48236

OTTO H HAHNE MD
8425 E TWELVE MILE RD
WARREN MICHIGAN 48093

WALDEMAR B HARTMANN MD
1416 S GRATIOT
MOUNT CLEMENS MICH 48043

HERBERT M HILLER MD
13500 E TWELVE MILE RD
WARREN MICHIGAN 48093

LEON S HIRZEL MD
33080 GARFIELD
FRASER MICHIGAN 48026

JAMES M HOLBROOK MD
23700 VAN DYKE AVE
WARREN MI 48089

JULIUS HORVATH MD
18847 ROSETTA
EAST DETROIT MICH 48021

A JOSEPH HOSKI MD
8425 E TWELVE MILE RD
WARREN MI 48093

MICHAEL HRANCHOOK MD
30001 VAN DYKE
WARREN MICHIGAN 48093

FRANK J HULL MD
MACOMB DAILY BLDG
MT CLEMENS MI 48043

CLAUDIO M IACOBELLI MD
21811 KELLY RD
EAST DETROIT MI 48021

DANILO H IGLESIAS MD
229 S GRATIOT AVE
MT CLEMENS MI 48043

ERNESTO R IGLESIAS MD
P O BOX 665
MT CLEMENS MI 48043

ELI M ISAACS MD
17210 CEDARCROFT PL
SOUTHFIELD MI 48075

EDWARD K ISBEY MD
28495 HOOVER
WARREN MI 48093

ROBERT D ISGUT MD
28477 HOOVER RD
WARREN MI 48093

MANUEL JACOBS MD
23700 VAN DYKE AVE
WARREN MI 48089

JAMES H JEWELL MD
ROSEVILLE THEATRE BLDG
ROSEVILLE MICH 48066

JOHN P KANE MD
67 CASS AVE
MOUNT CLEMENS MICH 48043

PETER V KANE MD
230 NORTH AVE
MOUNT CLEMENS MICH 48043

WM J KANE MD L
171 NORTH AVENUE
MT CLEMENS MI 48043

HAROLD L KATZMAN MD
13500 E 12 MILE RD
WARREN MI 48093

ROBIN S KEY MD
28495 HOOVER RD
WARREN MI 48093

JOYCE W KINGSLEY JR MD
18801 TEN MILE RD
ROSEVILLE MICH 48066

PAUL R KIPP MD
14 BELLEVIEW
MT CLEMENS MICHIGAN 48043

WM B KIRTLAND JR MD
18801 E TEN MILE RD
ROSEVILLE MICHIGAN 48066

ALFRED A KLEIN MD
23700 VAN DYKE
WARREN MICH 48089

K H KNOBLAUCH MD
8425 TWELVE MILE RD E
WARREN MICHIGAN 48093

WM J KOKENY MD
23700 VAN DYKE AVE
WARREN MI 48093

RICHARD M KOMMEL MD
26510 DUNDEE
HUNTINGTON WDS MICH 48070

JOEL M KRIEGEL MD
35992 GRATIOT AVE
MT CLEMENS MI 48043

BRUCE KRIEGER MD
23365 COUNTRY WOODS LN
SOUTHFIELD MI 48075

HARVEY A KRIEGER MD
13500 12 MILE RD E
WARREN MI 48093

MORTON J KRIPKE MD
45420 VAN DYKE
UTICA MICHIGAN 48087

JOSEPH D KROON MD
14 BELLEVIEW
MT CLEMENS MICHIGAN 48043

HYMAN KURTZ MD
16712 TIMBERVIEW
FRASER MI 48026

GEORGE P KYPROS MD
25520 LITTLE MACK
ST CLAIR SHORES MI 48081

JOSEPH J LAHOOD MD
319 N GRATIOT
MT CLEMENS MI 48043

CHARLES LAPP MD
7817 MC CLELLAN
UTICA MICHIGAN 48087

LAWRENCE E LEE MD
11885 E 12 MILE RD
WARREN MICHIGAN 48093

THOMAS E LEE MD
13403 E 13 MILE RD
WARREN MI 48093

CHARLES LEVI MD
8262 E TWELVE MILE RD
WARREN MICHIGAN 48093

SAMUEL A LICATA MD
21349 KELLY RD
EAST DETROIT MI 48021

ONOFRE B LLANEZA MD
38544 FOXCROFT BLVD
MT CLEMENS MI 48043

RODOLFO V LOO MD
2597 TOWN HILL DR
TROY MI 48084

GERALD L LOPEZ MD
37159 CHARTER OAKS BLD
MT CLEMENS MI 48043

RICHARD J LUBERA MD
12296 TWELVE MILE RD
WARREN MI 48093

ANDREW J MAGUIRE MD
45569 VAN DYKE
UTICA MICH 48087

EDO V MARCUZ MD
45420 VAN DYKE
UTICA MI 48087

MAX W MATTES MD
20280 FOREST WOOD DR
SOUTHFIELD MI 48075

C MATTHEWS JR MD
230 NORTH AVE
MT CLEMENS MICHIGAN 48043

EDWARD S MAXIM M D
225 S GRATIOT
MT CLEMENS MI 48043

MARY L MAYER MD
715 S ROGERS APT 19
MASON MI 48854

JOHN O MC GINTY MD
243 S GRATIOT
MT CLEMENS MICHIGAN 48043

KATHRYN MC MORROW MD
22900 E REMICK
MT CLEMENS MI 48043

G MEDINA MD
8425 E 12 MILE RD
WARREN MI 48093

KRIKOR MERAMETDJIAN MD
22841 VANDYKE
WARREN MI 48089

JULE J MERRITT MD
35992 S GRATIOT AVE
MT CLEMENS MI 48043

HAROLD D MESSMER MD
7817 MCCLELLAN
UTICA MICHIGAN 48087

SIDNEY S MEYERS MD
28477 HOOVER
WARREN MICHIGAN 48093

GEORGE W MILLER MD
18815 E TEN MILE RD
ROSEVILLE MI 48066

SIDNEY S MILLER MD
28477 HOOVER RD
WARREN MICHIGAN 48093

EARL G MOEHN MD
309 MACOMB DAILY BLDG
MT CLEMENS MI 48093

GEO F MOORE MD L
69434 N FOREST
RICHMOND MI 48062

GERALD W MORRIS MD
14 BELLEVIEW
MT CLEMENS MICHIGAN 48043

PHILIP T MULLIGAN MD
612 MONITOR LEADER BL
MOUNT CLEMENS MICH 48043

ATALAY M MURGUZ MD
26451 RYAN RD
WARREN MI 48091

P F NOWOSIELSKI MD
31271 HARPER AVE
ST CLAIR SHORES MI 48082

HELEN M NUTTING MD
22631 GREATER MACK
ST CLAIR SHORES MI 48080

VINCENT R O SHEE MD
8216 E TWELVE MILE RD
WARREN MI 48093

ORVILLE OUGHTRED MD
26401 HARPER
ST CLAIR SHORES MI 48081

MARC PACHO MD
32397 DESMOND DR
WARREN MI 48093

DELMO A PARIS MD
18801 E TEN MILE RD
ROSEVILLE MICH 48066

N H PARMELEE MD
50551 VAN DYKE AVE
UTICA MICHIGAN 48087

LEO PARNAGIAN MD
230 NORTH AVE
MT CLEMENS MI 48043

GILBERT PENA MD
4573 RANCH LANE
BLOOMFIELD HILLS MI 48013

FLORENCE PEREZ MD
32397 DESMOND DR
WARREN MI 48093

ANTHONY C PORRETTA MD
423 NORTH SHORE DR
ST CLAIR SHORES MI 48080

ANGELO PUGLIESI MD
21811 KELLY
EAST DETROIT MI 48021

FRANK J PUGLIESI MD
21811 KELLY RD
EAST DETROIT MI 48021

MOUFID RAGHEB MD
37976 GRATIOT
MT CLEMENS MI 48043

GERALD RAKOTZ MD
13087 ELEVEN MILE RD
WARREN MICHIGAN 48093

ANTONIO E RAMOS MD
29846 SCHOENHERR
WARREN MICHIGAN 48093

RUFUS H REITZEL MD
199 S GRATIOT AVE
MOUNT CLEMENS MICH 48043

LEWIS O RICKMAN MD
14 HOWARD ST
MT CLEMENS MI 48043

CHARLES B RIDDLE MD
620 EASTLAND PROF BLD
HARPER WOODS MI 48236

E A RINKENBERGER MD
243 S GRATIOT AVE
MT CLEMENS MICH 48043

JOS RIVKIN MD
14 BELLEVIEW
MOUNT CLEMENS MICH 48043

GEO E ROTH MD
19136 MENDOTA AVE
DETROIT MI 48221

ARTHUR M ROTHMAN MD
22422 GRATIOT AVE
EAST DETROIT MICH 48021

RONALD E ROURKE MD
14628 E 7 MILE RD
DETROIT MI 48205

DANIEL L ROUSSEAU MD
MONITOR LEADER BLDG
MT CLEMENS MICHIGAN 48043

WM E RUSH MD
ST JOHNS HOSP
DETROIT MI 48236

PAUL RUSSELL MD A
207 CIRCLE DR
TRAVERSE CITY MI 49684

JACK RYAN MD
23700 VAN DYKE AVE
WARREN MICH 48089

THOMAS E RYAN MD
39310 GARY AVE
MT CLEMENS MICHIGAN 48043

RONALD J SABLES MD
225 S GRATIOT AVE
MT CLEMENS MI 48043

RUSSELL F SALDT MD
230 NORTH AVE
MOUNT CLEMENS MICH 48043

A C SANDOVAL JR MD
ST JOSEPHS HOSPITAL
MT CLEMENS MI 48043

CARL J SARNACKI MD
8425 TWELVE MILE RD E
WARREN MICHIGAN 48093

HOWARD J SAWYER MD
11177 E 8 MILE RD
WARREN MI 48089

JOS N SCHER MD
130 CASS AVE
MOUNT CLEMENS MICH 48043

SYDNEY SCHER MD
132 CASS AVE
MOUNT CLEMENS MICH 48043

ROBERT F SCHMUNK MD
136 CASS AVENUE
MT CLEMENS MICHIGAN 48043

MAHMOUD M SELIM MD
8425 E 12 MILE RD
WARREN MI 48093

THOMAS J SETTER MD
319 N GRATIOT AVE
MT CLEMENS MI 48043

JACK M SHARTSIS MD
11885 E 12 MILE RD
WARREN MI 48093

YEHYA A SHAWKY MD
8425 E TWELVE MILE RD
WARREN MICHIGAN 48093

EZRA S SHAYA MD
31170 HOOVER
WARREN MICHIGAN 48093

LAWRENCE F SHEPPARD MD
23700 VAN DYKE AVE
WARREN MI 48089

HERBERT D SHERBIN MD
12500 TWELVE MILE RD
WARREN MICHIGAN 48093

GERALD SHERMAN MD
12500 12 MILE RD
WARREN MI 48093

EDWARD G SIEGFRIED MD
229 S GRATIOT AVE
MT CLEMENS MICH 48043

MICHAEL P SILVESTER MD
350 WESTVIEW TERRACE
ARLINGTON TEXAS 76013

MILTON F SIMMONS MD
12500 E TWELVE MILE RD
WARREN MICHIGAN 48093

WM N SIMS MD
229 S GRATIOT
MOUNT CLEMENS MICH 48043

NELSON SINGER MD
22100 GRATIOT AVE
EAST DETROIT MICH 48021

JAMES B STANTON MD
319 N GRATIOT AVE
MT CLEMENS MICH 48043

WM A STARBIRD MD
8216 E 12 MILE RD
WARREN MICH 48093

MORRIS STARKMAN MD
28477 HOOVER
WARREN MICHIGAN 48093

GEORGE H STEELE MD
229 S GRATIOT
MT CLEMENS MICHIGAN 48043

EUGENE STEINBERGER MD
23700 VAN DYKE
WARREN MI 48089

CARMELA M STELLA MD
69311 MAIN ST
RICHMOND MI 48062

JOSEPH E STEPKA M D
50551 VAN DYKE
UTICA MI 48087

KIRWIN STIEF MD
218 N CHRISTINE CIRCLE
MT CLEMENS MI 48043

JULIUS STONE MD
198 S GRATIOT
MT CLEMENS MI 48043

CHARLES STDYKA MD
21420 HARPER
ST CLAIR SHORES MI 48080

DONALD E STROUD DDS A
8425 TWELVE MILE RD
WARREN MI 48093

OSCAR D STRYKER MD L
38422 HIDDEN LANE
MT CLEMENS MI 48043

FREDK A STURM MD
76 LOCHMOOR
GROSSE PTE MI 48236

ADOLPH W SUKSTA MD
23350 GRATIOT
EAST DETROIT MICH 48021

M SUZUKI M D
23700 VAN DYKE
WARREN MICH 48089

AKEMI TAKEKOSHI MD
22900 E REMICK
MT CLEMENS MI 48043

FRANK E TAORMINA MD
P O BOX 83
MT CLEMENS MI 48043

ALFRED A THOMPSON MD
126 CASS AVE
MOUNT CLEMENS MICH 48043

BERNARD L TOFT MD
29256 RYAN RD
WARREN MI 48092

DAVID TRANSUE MD
13403 E 13 MILE RD
WARREN MI 48093

KENNETH F TUCKER MD
23700 VAN DYKE
WARREN MI 48089

WILLIAM URBANCIC MD
22048 GRATIOT
EAST DETROIT MI 48021

RAMON A URENA MD
38028 ROCK HILL RD
MT CLEMENS MI 48043

LACEY WALKE MD
214 DAV WHITNEY BLDG
DETROIT MI 48226

ALBERT A J WALLAERT MD
23700 GRATIOT
EAST DETROIT MI 48021

FREDRIC WATTS MD
27440 HOOVER RD
WARREN MI 48093

K A WEINBERGER MD
27643 SCHOENHERR RD
WARREN MI 48093

CHAS J WEINGARTEN MD
12500 E 12 MILE RD
WARREN MI 48093

JACK I WEISS MD
23700 VAN DYKE AVE
WARREN MICH 48089

ALEC WHITLEY MD
21707 ERBEN DR
ST CLAIR SHORES MI 48081

MAURICE M WILDE MD L
5930 CHICAGO
WARREN MICH 48092

NORMAN R WILSON MD
225 S GRATIOT AVE
MT CLEMENS MICHIGAN 48043

HENRY J WINKLER MD
32865 NORTH RIVER RD
MT CLEMENS MI 48043

CARL WITUS MD
21349 KELLY RD
EAST DETROIT MICH 48021

ERVIN WOLF MD
ROSEVILLE THEATRE BLDG
ROSEVILLE MI 48066

WM C WYTE MD
263 S GRATIOT AVE
MT CLEMENS MICHIGAN 48043

KEN YAMASAKI MD
23700 VAN DYKE
WARREN MICH 48089

DAN ZAVELA MD
679 N RENAUD
GROSSE PTE WDS MICH 48236

ROBERT A ZINK MD
25815 HARPER AVE
ST CLAIR SHORES MI 48081

MR GILBERT E ZOOK A
253 S GRATIOT
MT CLEMENS MI 48043

ALEX ZOTOVAS MD
23700 VAN DYKE AVE
WARREN MI 48089

NORMAN ZUCKER MD
11885 E 12 MILE RD
WARREN MI 48093

MANISTEE

LE ROY A FUTTERER MD
FOREST CLINIC BLDG
MANISTEE MICH 49660

ROBT R GARNEAU MD
FOREST CLINIC BLDG
MANISTEE MICH 49660

ERNEST C HANSEN MD
326 FIRST ST
MANISTEE MICH 49660

VICKERS HANSEN MD
310 NINTH ST
MANISTEE MI 49660

KARL K KELLAWAN MD
490 FOURTH ST
MANISTEE MI 49660

ROMAN R KNOBLICH MD
WEST SHORE HOSPITAL
MANISTEE MI 49660

JOHN F KONOPA MD
57 POPLAR ST
MANISTEE MICH 49660

ERNEST B MILLER MD R
8454 CANDLEWOOD
LARGO FLORIDA 33540

RICHARD L NOVACK MD
324 FIRST ST
MANISTEE MI 49660

ROGER PATERSON MD
310 9TH ST
MANISTEE MI 49660

HOMER A RAMSDELL MD L
398 RIVER ST
MANISTEE MI 49660

K G ROSENOW MD
FOREST CLINIC BLDG
MANISTEE MICH 49660

DONALD N SCHWING MD
FOREST CLINIC BLDG
MANISTEE MICH 49660

DAVID A WILD MD
84 CYPRESS ST
MANISTEE MI 49660

MARQUETTE

JAMES R ACOCKS MD
MORGAN HEIGHTS
MARQUETTE MICH 49855

BUSHARAT AHMAD MD
1414 W FAIR AVE
MARQUETTE MI 49855

ARTHUR L AMOLSCH MD L
1008 BLUFF ST
MARQUETTE MICHIGAN 49855

HENRY J BARSCH MD
1414 W FAIR AVE
MARQUETTE MI 49855

MATTHEW C BENNETT MD
1414 W FAIR AVENUE
MARQUETTE MICH 49855

ROBT F BERRY MD
1414 W FAIR AVENUE
MARQUETTE MI 49855

JOS P BERTUCCI MD
114 S FIRST ST
ISHPEMING MICH 49849

THOS B BOLITHO MD
1414 W FAIR AVENUE
MARQUETTE MICHIGAN 49855

ADAM BRISH MD
1414 W FAIR AVE
MARQUETTE MI 49855

RANKIN L CAREFOOT MD
1414 W FAIR AVENUE
MARQUETTE MICHIGAN 49855

WILBUR L CASLER MD L
131 E RIDGE ST
MARQUETTE MI 49855

LUCIANO CELORI MD
427 W COLLEGE
MARQUETTE MI 49855

DONAL T CONLEY MD
4400 N RIVER BAY RD
WATERFORD WISC 53185

MOSES COOPERSTOCK MD L
1414 W FAIR AVE
MARQUETTE MICH 49855

WM A CORCORAN MD L
168 DAVIS ST
ISHPEMING MI 49849

MICHAEL COYNE MD
1414 W FAIR AVE
MARQUETTE MI 49855

DONALD R ELZINGA MD
1414 W FAIR AVE
MARQUETTE MI 49855

EUGENE R ELZINGA MD L
1414 W FAIR AVENUE
MARQUETTE MICH 49855

JOHN W ENGLISH MD
1414 W FAIR AVENUE
MARQUETTE MICHIGAN 49855

D C FAHRBACH MD
SAND POINT RD
MUNISING MI 49862

R E FLORES MD
613 LAKE ST
MARQUETTE MI 49855

SOUTHGATE J GREEN MD

GWINN MICHIGAN 49843

CARL F HAMMERSTROM MD
1414 W FAIR AVE
MARQUETTE MI 49855

EUGENE W HILDEBRAND MD
MEDICAL CENTER
MUNISING MI 49862

WILLIAM F HOPKINS MD
1414 W FAIR AVENUE
MARQUETTE MICHIGAN 49855

DANL P HORNBOGEN MD
1414 W FAIR AVENUE
MARQUETTE MICHIGAN 49855

ELSTUN R HUFFMAN MD
1414 W FAIR AVENUE
MARQUETTE MICHIGAN 49855

WILLIAM C HUMPHREY MD
829 CROIX STREET
NEGAUNEE MICHIGAN 49866

ROBT G JAEDECKE MD
829 CROIX
NEGAUNEE MICH 49866

ELIZABETH D KANE MD R

JAMES B KEPLINGER MD
1414 W FAIR AVE
MARQUETTE MI 49855

HARRY KOENIG MD
540 E DIVISION ST
ISHPEMING MI 49849

E F KRONSCHNABEL MD
1414 W FAIR AVE
MARQUETTE MI 49855

JOHN C KUBLIN MD
1414 W FAIR AVE
MARQUETTE MI 49855

WARREN C LAMBERT MD
347 E RIDGE ST
MARQUETTE MI 49855

M J LEXMOND MD
524 MATHER AVE
ISHPEMING MICHIGAN 49849

E T LINCKE MD
1414 W FAIR AVENUE
MARQUETTE MICHIGAN 49855

Marquette County

JAMES W LYONS MD
1414 W FAIR AVE
MARQUETTE MICH 49855

NORMAN L MATTHEWS MD
N MICH CHILD CLINIC
MARQUETTE MICH 49855

THOMAS J MUDGE MD
1414 W FAIR AVENUE
MARQUETTE MI 49855

ARCHIE S NARDTZKY MD
MIRACLE CIRCLE
ISHPEMING MICH 49849

R WILLIAM NEUMANN MD
1414 W FAIR AVE
MARQUETTE MI 49855

WILSDN G NEWELL MD
101 S FOURTH
ISHPEMING MI 49849

OSMO NIEMI MD R
BDX 151
GWINN MI 49843

EARLE S OLDHAM MD
427 W CDLLEGE AVE
MARQUETTE MI 49855

HUSCHANG M PAYAN MD
8ELL MEMDRIAL HDSP
ISHPEMING MI 49849

WALLACE G PEARSDN MD
1414 W FAIR AVENUE
MARQUETTE MICHIGAN 49855

PHILLIP E PERKINS MD
37084 HARRISDN CT #707
FARMINGTDN MI 48024

FLDRENCE A PILLOTE MD
26 LAKEVIEW DR
MARQUETTE MICHIGAN 49855

JOHN F PILLOTE MD
1414 W FAIR AVENUE
MARQUETTE MICHIGAN 49855

RICHARD POTTER MD
RDUTE 1 BOX 63A
NEGAUNEE MI 49866

LOUIS RDSENBAUM MD
524 MATHER ST
ISHPEMING MICH 49849

COL ROBERT ROUSE MC A
USAF HOSPITAL K I
SAWYER AFB MICH 49843

FREDK C SA8IN MD
1414 W FAIR AVENUE
MARQUETTE MICH 49855

W GENE SCHRDEDER MD
524 MATHER ST
ISHPEMING MI 49849

SARA K D SCHWEINSBERG A
COUNTY RD 492
MARQUETTE MI 49855

MILTON SDDERBERG MD
1414 W FAIR AVE
MARQUETTE MI 49855

FREDERICK A STONE MD
829 CRDIX ST
NEGAUNEE MI 49866

JAMES F TDBIN JR MD
724 ELLIDTT AVE
ISHPEMING MICHIGAN 49849

DAVID R WALL MD
AITAMDNT & FISHER
MARQUETTE MICHIGAN 49855

ROBERT B WHITE MD
1503 CENTER ST
MARQUETTE MI 49855

REGINALD G WILLIAMS MD
524 MATHER ST
ISHPEMING MICH 49849

GEDRGE M WILSDN JR MD
1414 W FAIR AVENUE
MARQUETTE MICHIGAN 49855

KENNETH C WRIGHT M D
1414 W FAIR AVENUE
MARQUETTE MICH 49855

MASON

HERBERT G BACON JR MD
101 N MAIN
SCOTTVILLE MICH 49454

A FLDYD BDON MD
203 N FERRY
LUDINGTDN MICH 49431

JDHN R CARNEY MD
202 N PARK ST
LUDINGTDN MICH 49431

RUTH V C CARNEY MD
202 N PARK AVE
LUDINGTON MICH 49431

R J CASTELLANI MD
PD BDX 349
LUDINGTON MICH 49431

HARRY L CLARK MD L
619 N LAKESHDRE DR
LUDINGTON MI 49431

F E ERLANDSON MD
121 E LUDINGTDN AVE
LUDINGTON MI 49431

R L EWING MD
600 TINKHAM AVE
LUDINGTON MICHIGAN 49431

ROBERT IRICK MD
MEMORIAL HOSPITAL
LUDINGTON MI 49431

GLADYS J KLEINSCHMIDT
100 W BUTTERFIELD RD
DAK 8RDOK ILLINDIS 60521

WM S MARTIN MD
107 LUDINGTDN
LUDINGTON MICH 49431

GERRY MAYER MD
806 RUSSELL
LUDINGTDN MI 49431

RDBT A OSTRANDER MD R
5000 E GRANT RD #5
TUCSDN AZ 85716

CHAS A PAUKSTIS MD
111 E CDURT ST
LUDINGTDN MICH 49431

JOHN RAMSEY MD
902 E LUDINGTDN AVE
LUDINGTDN MI 49431

WM F SUTTER MD
220 S JAMES ST
LUDINGTDN MICH 49431

GIRARD VEENSCHOTEN MD
380 SDUTH ST
BALDWIN MI 49304

JAMES E WAUN MD
1011 N SHERMAN
LUDINGTON MI 49431

MECOSTA

CHARLES M ASPLUND MD
213 ELM ST
BIG RAPDIS MI 49307

FRED F BIRKAM MD
FERRIS STATE CDLLEGE
HEALTH CENTER
BIG RAPIDS MI 49307

JACD8 BRUGGEMA MD
101 N MAIN ST
EVART MICH 49631

JEROME A CDNRAD MD
405 WINTER AVE
BIG RAPIDS MI 49307

RDY A DAVIS MD
FERRIS STATE CDLLEGE
BIG RAPIDS MI 49307

JACK HALDEMAN MD
1014 S STATE ST
8IG RAPIDS MICH 49307

LELAND A HICKOX MD
1014 S STATE ST
BIG RAPIDS MICH 49307

PAUL B KILMER MD L
350 W UPTON AVE
REED CITY MI 49677

EDWARD H KDWALESKI MD
REMUS MI 49340

NORMAN V LINCDLN MD
108 E UPTDN
REED CITY MI 49677

FRANK A MERLD MD
206 S MICHIGAN ST
8IG RAPIDS MICH 49307

HARRY MDHAMMED MD
809 IVES AVE
BIG RAPIDS MI 49307

WM W MDDN MD
BDX 175
BALDWIN MI 49304

LORENZD R NELSDN MD
R F D 1
BALDWIN MICH 49304

LELAND B PHELPS MD
548 BENJAMIN SE
GRAND RAPIDS MI 49506

GEORGE B PUSCZAK MD
213 ELM ST
BIG RAPIDS MI 49307

JAMES L TYSDN MD
1014 SOUTH STATE ST
BIG RAPIDS MICH 49307

EDWARD W VAN AUKEN MD
229 S WARREN
BIG RAPIDS MICH 49307

JAMES E WALTERS MD
1014 S STATE ST
BIG RAPIDS MICH 49307

MENOMINEE

NILS D AGNEBERG MD
531 1ST ST
MENDMINEE MICH 49858

HERMAN R BRUKARDT MD
534 FIRST ST
MENOMINEE MICH 49858

RICHARD D CHALTRY DD
STEPHENSDN MI 49887

FRANCIS J DEWANE MD
413 10TH AVE
MENDMINEE MICH 49858

LEDN GARBOWICZ MD
1713 SEVENTH ST
MENDMINEE MI 49858

L GRANT GLICKMAN MD L
958 FIRST ST
MENOMINEE MICH 49858

JOHN R HEIDENREICH MD
DAGGETT MI 49821

WM S JONES MD L
1146 TENTH AVE
MENOMINEE MI 49858

WM S JDNES JR MD
1146 10TH AVE
MENOMINEE MICH 49858

KARM C KERWELL MD L
P D BOX 17
STEPHENSDN MI 49887

BENEDICT M POLCYN MD
205 FIRST ST
MENOMINEE MI 49858

MIDLAND

ADELTD ADAN MD
3103 WASHINGTDN
MIDLAND MI 48640

ARTHUR R 8ASEL MD
901 CRESCENT
MIDLAND MI 48640

MAC B BENJAMIN MD
521 MADISDN ST
SAGINAW MI 48603

DDNALD R BENNETT MD
3902 APPLEWDDD
MIDLAND MI 48640

JDSEPH A BERNIER MD
218 E RAILWAY
SANFDRD MI 48657

J F BLACKHURST M D
2715 ASHMAN STREET
MIDLAND MICH 48640

RDBT T BLACKHURST MD
233 E LARKIN
MIDLAND MICH 48640

RDBT E BDWSHER MD
4005 ORCHARD DR
MIDLAND MICHIGAN 48640

RDBT G 8RIDGE MD
2715 ASHMAN
MIDLAND MICH 48640

DAN J BULMER MD
2707 ASHMAN ST
MIDLAND MICH 48640

RAYMDND C BUSH MD
808 W SUGNET
MIDLAND MICHIGAN 48640

J DANIEL CLINE MD
920 W SUGNET
MIDLAND MI 48640

JAMES A DEVLIN MD
115 JEROME
MIDLAND MICH 48640

DALE J DUCDMMUN MD
P D BDX 1693 MED DEPT
MIDLAND MI 48640

DENNIS G EGNATZ MD
312 E MAIN ST
MIDLAND MI 48640

RUTH ELLIS M D
2510 ASHMAN
MIDLAND MICHIGAN 48640

DOZIER N FIELDS JR MD
515 W MAIN ST
MIDLAND MICH 48640

PETER C GAY MD
P O BOX 1693 MED DEPT
MIDLAND MI 48640

HAROLD H GAY MD R
4689 RUHLE RD
COLEMAN MI 48618

ROY M GOETHE MD
222 N SAGINAW RD
MIDLAND MI 48640

HAROLD L GORDON MD
DOW CHEMICAL CO
MIDLAND MICH 48640

ROBERT GRANT MD
2931 MANOR DR
MIDLAND MICHIGAN 48640

NORMAN C GREWE MD
501 E PINE ST
MIDLAND MICHIGAN 48640

EDW P GUNDERSON JR MD
2000 DILLOWAY DR
MIDLAND MI 48640

COLLEEN HABERSTROH MD
3710 APPLEWOOD
MIDLAND MICHIGAN 48640

WILLIAM E HARRIGAN MD
110 W SUGNET
MIDLAND MICHIGAN 48640

D D HEFFERNAN MD
ROUTE #8
MIDLAND MICH 48640

WM A HIMMELSBACH MD
5411 STURGEON CRK PKWY
MIDLAND MI 48640

BENJ B HOLDER MD
P O BOX 1693 MED DEPT
MIDLAND MICH 48640

FREDERICK R HOLLAND MD
1801 RAPANOS
MIDLAND MI 48640

IRVIN M HOWE MD
110 W SUGNET
MIDLAND MICH 48640

RICHARD H HOWELL MD
2707 ASHMAN ST
MIDLAND MI 48640

MARTIN J ITTNER MD
217 N SAGINAW RD
MIDLAND MICH 48640

DAVID B JOHNS MD
P O BOX 1693 MED DEPT
MIDLAND MI 48640

YAHYA KIYAK MD
206 GRAHAM
MIDLAND MI 48640

CHAS G KRAMER MD
P O BOX 1693
MIDLAND MICHIGAN 48640

HAROLD A KWAST MD
2715 ASHMAN
MIDLAND MICHIGAN 48640

MICHAEL S LEAHY MD
MIDLAND HOSPITAL
MIDLAND MI 48640

LINFERD G LINABERY MD
3808 NOTTINGHAM TERR
MIDLAND MI 48640

KARL W LINSENMANN MD
2604 MANOR DR
MIDLAND MICHIGAN 48640

V A MARKS MD
2706 LOUANNA
MIDLAND MICHIGAN 48640

WM A MAYNARD MD R
3862 N W RIVER RD
SANFORD MICHIGAN 48657

E M MC GOWAN MD
910 EASTLAWN DR
MIDLAND MI 48640

EDWARD H MEISEL JR MD
MASONIC BLDG
MIDLAND MICH 48640

MICHAEL P MESAROS MD
222 N SAGINAW RD
MIDLAND MICHIGAN 48640

G FREDK MOENCH MD R
147 CENTER ST
SANFORD MICHIGAN 48657

RICHARD MOULTON MD
115 JEROME ST
MIDLAND MI 48640

GURDON R PATTON MD
2707 ASHMAN
MIDLAND MI 48640

MELVIN H PIKE MD
224 E LARKIN
MIDLAND MICH 48640

ROBERT W POLLOCK MD
2707 ASHMAN ST
MIDLAND MICH 48640

LEONARD A POZNAK MD
4005 ORCHARD DR
MIDLAND MICH 48640

STEPHEN H RANDOLPH MD
201 E ELLSWORTH ST
MIDLAND MICHIGAN 48640

WILLIAM B REDMON MD
115 JEROME
MIDLAND MICHIGAN 48640

JAMES REIF MD
222 N SAGINAW RD
MIDLAND MI 48640

THOMAS E RUSH MD
115 JEROME ST
MIDLAND MI 48640

CHARLES A SANISLOW MD
2707 ASHMAN ST
MIDLAND MICHIGAN 48640

H C SCHARNWEBER MD
P O BOX 1693 MED DEPT
MIDLAND MICHIGAN 48640

CHARLES A SCHOFF MD
5209 SUNSET DRIVE
MIDLAND MI 48640

ANTON SCHWARZ MD
12437 WINDSOR
CARMEL INDIANA 46032

JOHN W SHRINER MD
222 N SAGINAW RD
MIDLAND MICH 48640

DONALD S SMITH JR MD
2715 ASHMAN
MIDLAND MI 48640

SIDNEY N SMOCK MD
3410 VALLEY DR
MIDLAND MI 48640

WILBUR D TOWSLEY MD R
515 W MAIN ST
MIDLAND MICH 48640

GEORGE ULMER M D
4005 ORCHARD
MIDLAND MICH 48640

ROBERT L VANSICKLE MD
222 N SAGINAW RD
MIDLAND MI 48640

RICHARD W WELK MD
1705 DILLOWAY
MIDLAND MI 48640

HARRY O WESTPHAL MD
910 EASTLAWN
MIDLAND MI 48640

CHAS H WILLISON MD
122 TOWNSEND ST
MIDLAND MICH 48640

G JAMES YOBST MD
2719 ASHMAN
MIDLAND MICHIGAN 48640

MONROE

FLORENCE O AMES MD L
2 W NOBLE AVE
MONROE MI 48161

SHAPOOR ANSARI MD
750 STEWARD RD
MONROE MI 48161

C D BARRETT SR MD L
2133 HOLLYWOOD DR
MONROE MI 48161

ANTHONY H BARTOLO MD
757 N MONROE
MONROE MI 48161

CHARLES E BLACK MD
721 N MACOMB ST
MONROE MICHIGAN 48161

LEONARD C BLAKEY MD L
745 N MONROE ST
MONROE MICHIGAN 48161

WM W BUNO MD L
222 N MONROE
MONROE MICH 48161

J J BURROUGHS MD
745 N MONROE ST
MONROE MICHIGAN 48161

ZOLTAN B CIGANY MD
CARLETON MI 48117

BRUCE CLARK MD
8308 LEWIS AVE
TEMPERANCE MICHIGAN 48182

S G COCORELIS MD
750 STEWARD RD
MONROE MI 48161

FRANK COSTA MD
21941 WOODRUFF
ROCKWOOD MI 48173

JOSE DEL-ROSARIO MD
750 STEWART
MONROE MI 48161

JOY O S DIEHL MD
15463 S MONROE
MONROE MICHIGAN 48161

GEORGE Z DIEHL MD
721 N MACOMB
MONROE MICHIGAN 48161

DALE W DOUGLAS MD
124 COLE RD
MONROE MICH 48161

EMILIO A ESPINOSA MD
9042 LEWIS AVE
TEMPERANCE MI 48182

ROBT T EWING MD L
201 N MACOMB
MONROE MI 48161

JOHN P FLANDERS MD R
5347 QUESTA TIERRA DR
PHOENIX ARIZ 85012

REGINALD A FRARY MD L
CTRY CLUB MOBILE MAN
HWY 19 TROUT LK
EUSTIS FLORIDA 32726

JOHN W FREUD MD
1262 N MACOMB ST
MONROE MICH 48161

HILDA M HENSEL MD
12 E 4TH ST
MONROE MICH 48161

NIKOLAS HNATCZUK MD
8078 SUMMERFIELD
LAMBERTVILLE MICH 48144

FRANCIS IVANICHEK MD
29 WASHINGTON ST
MONROE MI 48161

A ESTHER JOHNSON MD
751 N MONROE ST
MONROE MICHIGAN 48161

S NEWTON KELSO JR MD
116 COLE RD
MONROE MICHIGAN 48161

JOHN R KING MD
12 EAST 4TH ST
MONROE MICHIGAN 48161

EDWARD W LABOE MD R
424 HOLLYWOOD
MONROE MI 48161

GERALD P LAMMERS MD
IDA MI 48140

JOSEPH LIBRES MD
721 N MACOMB ST
MONROE MI 48161

WARREN J LIEDEL MD
136 COLE RD
MONROE MICHIGAN 48161

EDGAR C LONG MD R
P O BOX 1120
SEDONA ARIZONA 86336

WILLIAM F LUSHER MD
8308 LEWIS AVENUE
TEMPERANCE MICHIGAN 48182

REGINALD W MC GEOCH MD L
718 N MACOMB ST
MONROE MI 48161

AMIR H MEHREGAN MD
12 E FOURTH ST
MONROE MI 48161

WALTER A MEIER MD
134 COLE RD
MONROE MICHIGAN 48161

W S MIDDLETON MD
219 W FRONT STREET
MONROE MICH 48161

JIMMY MISTRY MD
MERCY HOSPITAL
MONROE MI 48161

WALTER L MOLESKI MD
134 COLE RD
MONROE MI 48161

MEHMET N OZOAGLAR MD
721 N MACOMB
MONROE MICHIGAN 48161

EMILIO PENA MD
424 MONROE ST
DUNDEE MICHIGAN 48131

HERMANN K B PINKUS MD
415 S MONROE
MONROE MICH 48161

JULIO C POSTIGO MD
721 N MACOMB
MONROE MI 48161

J LAURENCE PROCTOR MD
750 STEWART
MONROE MI 48161

ALBERT H REISIG MD
1 S MONROE ST
MONROE MICH 48161

DONALD L SALVA MD
753 N MONROE
MONROE MI 48161

BERNARD SISMAN MD
130 COLE RD
MONROE MICHIGAN 48161

THOMAS H SNIDER MD
204 W ELM AVE
MONROE MI 48161

ROBT G STREICHER MD
729 N MONROE ST
MONROE MICH 48161

SPENCER H WAGAR MD
1310 N MACOMB
MONROE MICHIGAN 48161

VERNON L WEEKS MD
749 N MONROE ST
MONROE MI 48161

ROLLAND W WILKINS MD
118 COLE RD
MONROE MICHIGAN 48161

ROBT J WILLIAMS MD L
158 MACOMB CT
MONROE MICHIGAN 48161

MUSKEGON

AUSTIN A AARDEMA MD
1470 PECK ST
MUSKEGON MICHIGAN 49441

ARDEN G ALEXANDER MD
1725 PECK ST
MUSKEGON MI 49441

RICHARD T ALLEN MD
768 W BROADWAY
MUSKEGON HTS MI 49444

WILLIAM J ALT MD
MEDICAL ARTS CENTER
MUSKEGON MICHIGAN 49440

DAVID A AMOS MD
307 MEDICAL ARTS BLDG
MUSKEGON MI 49440

G W ANNESSA MD
MEDICAL ARTS CENTER
MUSKEGON MICHIGAN 49440

RALPH F ASKAM MD
MEDICAL ARTS CENTER
MUSKEGON MICHIGAN 49440

ANNIE L ATKINSON MD A
P O BOX 233
MONTAGUE MICHIGAN 49437

RALPH V AUGUST MD
72 E BROADWAY
MUSKEGON HEIGHTS MI 49444

HELEN S BARNARD MD R
1381 CREEK RD APT 04
MUSKEGON MI 49441

JAMES W BARNES MD
102 PROFESSIONAL BLDG
MONTAGUE MICH 49437

JAMES M BARNETT MD
2416 PECK ST
MUSKEGON MI 49444

ARTHUR L BENEDICT JR
22 W SOUTHERN AVE
MUSKEGON MICH 49441

ROBT E BLOOM MD
MEDICAL ARTS CENTER
MUSKEGON MICH 49440

ROBT E BOLTHOUSE MD
2101 PECK ST
MUSKEGON HTS MICH 49444

WM H BONO MD
3535 PARK ST
MUSKEGON MICH 49444

DE VERE R BOYD MD
1735 PECK ST
MUSKEGON MICH 49441

JACK L BOYD MD A
BOX C
TRAVERSE CITY MI 49684

PARK S BRADSHAW MD
MEDICAL ARTS CENTER
MUSKEGON MICH 49440

JAMES H BULTEMA MD
1470 PECK ST
MUSKEGON MI 49441

J MAX BUSARD MD
1200 RANSOM
MUSKEGON MICHIGAN 49442

THOS R BUSARD MD
MEDICAL ARTS CENTER
MUSKEGON MICHIGAN 49440

MR JAMES C CARLSON A
2060 BELMONT
MUSKEGON MI 49441

JAMES S CETON MD A
SUDAN INTERIOR MISSION
GALMI PAR MADAOUA
REPUBLIC OF NIGER
WEST AFRICA

ANTONIO CHIASSON MD
4056 NOB HILL DR
MUSKEGON MICHIGAN 49441

J W CHRISTOPHERSEN MD
1276 LAKE SHORE DR
MUSKEGON MI 49444

HENRY W CLAPP MD
202 WESTGATE MED TWR
MUSKEGON MI 49441

H EUGENE CORNELL MD
104 NORTON MEDICAL CTR
MUSKEGON MI 49442

DONALD K CRANDALL MD
4155 NOB HILL DR
NORTON SHORES MI 49441

JOHN W CRAWFORD JR MD
1470 PECK ST
MUSKEGON MICHIGAN 49441

ANNE B CRONICK MD
435 WHITEHALL RD
MUSKEGON MI 49445

DOROTHY D DART MD A
4110 MAPLE LANE
RIVES JUNCTION MI 49277

KSHITISH C DAS MD
NORTON MEDICAL CTR
MUSKEGON MI 49444

ADOLPH F DASLER MD
2208 GLENDALE
AUGUSTA GA 30904

HENRY DE LEEUW MD
4090 HIGHGATE RD
MUSKEGON MI 49441

ROLAND W DEYOUNG MD
3800 MONTEVIEW
MUSKEGON MICHIGAN 49441

FRANK DISKIN MD
1324 MARQUETTE AVE
MUSKEGON MICHIGAN 49442

NICHOLAS J ELLIS MD
1891 LAKE SHORE DR
MUSKEGON MI 49444

PAUL R ENGLE MD DIR
MUSKEGON CO HLTH DEPT
MUSKEGON MI 49440

ALBERT O ENGSTROM MD
117 W COLBY
WHITEHALL MICH 49461

JOHN C FARMER MD
MEDICAL ARTS CENTER
MUSKEGON MICH 49440

ENID FILLINGHAM MD R
1034 GILES RD
MUSKEGON MI 49445

ROBT J FLES MD
1715 PECK ST
MUSKEGON MICH 49441

JOHN D FOLSOM MD
1706 PECK ST
MUSKEGON MICH 49441

PHILIP H FRANDSEN MD
1470 PECK ST
MUSKEGON MICHIGAN 49441

PHILLIP E FRY MD A
680 ASH
DENVER CO 80220

E M FUGATE MD
206 WESTGATE MED TWR
MUSKEGON MICH 49441

EVERETT W GAIKEMA MD R
605 FIRST ST
NORTH MUSKEGON MI 49445

FRANK W GARBER JR MD
601 RUDDIMAN
NO MUSKEGON MI 49445

FRANK W GARBER MD L
235 MONROE AVENUE
MUSKEGON MI 49441

ROBT E GARRISON JR MD
210 MED ARTS BLDG
MUSKEGON MI 49440

DOUGLAS H GIESE MD
2218 SOUTHWOOD DR
MUSKEGON MICH 49441

JAMES L GILLARD MD
1642 PECK ST
MUSKEGON MICHIGAN 49441

MARTHA H GOLTZ MD L

MONTAGUE MI 49437

RONALD GRANT DDS A
P O BOX 724
MUSKEGON MI 49443

ERWIN GRASMAN MD
NORTON MEDICAL CTR
MUSKEGON MI 49441

CHAS J GRAYSON MD
910 W HILE RD
MUSKEGON MI 49441

LAWRENCE E GRENNAN MD
1200 RANSOM
MUSKEGON MI 49440

ROBT M GRIFFITH MD
868 W BROADWAY
MUSKEGON HGTS MI 49441

HERNAN L GUIANG MD
1725 PECK ST
MUSKEGON MI 49441

DONALD W HACK MD
MEDICAL ARTS CENTER
MUSKEGON MICHIGAN 49440

WM J HANLEY MD
315 W CLAY AVE
MUSKEGON MICHIGAN 49440

W RICHARD HARRIS MD
852 WINSLOW
MUSKEGON MI 49441

JAMES E HARRYMAN MD
1200 RANSOM ST
MUSKEGON MICH 49442

SHATTUCK W HARTWELL MD L
NORTHSHORE HOSP
NORTH MUSKEGON MI 49445

JOHN G KLEMM HARVEY MD R
MERCY HOSPITAL
MUSKEGON MI 49443

DALE W HEERES MD
657 SEMINOLE RD
MUSKEGON MI 49441

JOHN HENEVELD MD R
10902 PEORIA AVE
SUN CITY ARIZONA 85351

ROBT G HENEVELD MD
1470 PECK ST
MUSKEGON MICHIGAN 49441

MARY E HENNESSY MD A
1200 RANSOM ST
MUSKEGON MI 49442

OSBIE J HERALD MD
208 WESTGATE MDCL TWR
MUSKEGON MI 49441

LELAND E HOLLY MD L
889 N SECOND ST
MUSKEGON MI 49440

LELAND E HOLLY 11 MD
889 N SECOND ST
MUSKEGON MICH 49440

WM J HORNBECK MD
3535 PARK ST
MUSKEGON MICH 49444

W LEONARD HOWARD MD
635 FRANKLIN ST
N MUSKEGON MI 49445

RICHARD A HUNTLEY MD
1704 W SHERMAN BLVD
MUSKEGON MICHIGAN 49441

ROBT M JESSON MD
1200 RANSOM ST
MUSKEGON MICH 49442

E H JOHNSTON MD
889 N SECOND ST
MUSKEGON MI 49440

ARTHUR H JOISTAD JR MD
889 N SECOND ST
MUSKEGON MICH 49440

STEPHEN P KAHN DDS A
1810 RUDDIMAN DR
NO MUSKEGON MI 49445

THOS J KANE MD M
2086 LEIMERT BLVD
OAKLAND CA 94602

CECELIA S KAY MD
1533 PECK ST
MUSKEGON MICHIGAN 49441

MARIE KEILIN MD L
1077 JEFFERSON APT 607
MUSKEGON MI 49440

JAY E KELLAWAY MD
1915 LOTUS SE
GRAND RAPIDS MI 49506

CHARLES T KELSO MD
15575 OAK DRIVE
SPRING LAKE MI 49456

HOWARD J KERR MD
3054 HENRY ST
MUSKEGON MICHIGAN 49444

RICHARD KISLOV MD
1810 RUDDIMAN AVE
NORTH MUSKEGON MI 49445

INGRAM J KLEAVELAND MD
1670 PECK STREET
MUSKEGON MICHIGAN 49441

MARLIN P KRENZ MD
HACKLEY UNION BK BLDG
MUSKEGON MI 49443

EUGENE W LANGE MD R
680 WAUWATOSA RD RTE2
CEDARBURG WI 53012

EMIL J LAURETTI MD
MEDICAL ARTS CENTER
MUSKEGON MICH 49440

L A LAURETTI MD
936 SECOND ST
MUSKEGON MICHIGAN 49440

VILDA S LAURIN MD L
MEDICAL ARTS CENTER
MUSKEGON MI 49440

GEO L LE FEVRE JR MD R
726 LAKE DR
NORTH MUSKEGON MI 49445

WM M LE FEVRE MD L
1011 RUDDIMAN
NO MUSKEGON MI 49445

LLOYD J LEMMEN MD
1724 PECK ST
MUSKEGON MICHIGAN 49441

MR A T LEONARD A
435 WHITEHALL RD
MUSKEGON MI 49445

LEONEL L LODER MD
406 HACKLEY BANK BLDG
MUSKEGON MICH 49440

ROBT A LOWRY MD A
300 HOPI PLACE
BOULDER CO 80302

LEWIS E MAIRE MD
1633 PECK ST
MUSKEGON MICH 49441

DOUGLAS E MAPLES MD
2 SOUTH BUYS RD
MUSKEGON MI 49445

JACK WINTON MARRS MD
308 MEDICAL ARTS CTR
MUSKEGON MICHIGAN 49440

E BRIAN MCHUGH MD
1810 RUDDIMAN
NO MUSKEGON MI 49445

JOHN N MC NAIR MD
936 SECOND ST
MUSKEGON MICH 49440

PAUL E MEDEMA MD L
1661 CLINTON ST
MUSKEGON MICH 49442

MARVIN B MEENGS MD A
10910 CAMEO DR
SUN CITY ARIZ 85351

LAMBERTUS MULDER MD
MEDICAL ARTS CENTER
MUSKEGON MICH 49440

C L A ODEN MD L
MEDICAL ARTS CENTER
MUSKEGON MI 49440

RICHARD R OSLUND MD
889 N SECOND ST
MUSKEGON MI 49440

ROBERT C PACKER MD
4216 HARBOR POINT DR
MUSKEGON MI 49441

FRANK W PARSONS MD
206 WESTGATE MED TWR
MUSKEGON MICHIGAN 49441

LESTER C PATERSON MD
1643 PECK ST
MUSKEGON MICH 49441

FRANK L PETTINGA MD
1470 PECK ST
MUSKEGON MICH 49441

ROBT D RISK MD
1160 RANSOM ST
MUSKEGON MICH 49442

HOWARD V SANDEN MD
1643 PECK ST
MUSKEGON MICH 49441

NORBERT W SCHOLLE MD
204 WESTGATE MED TWR
MUSKEGON MICHIGAN 49441

EMIL M SHEBESTA MD
MEDICAL ARTS CENTER
MUSKEGON MICH 49440

FREDRIC E SIMPSON MD
1903 MARQUETTE AVE
MUSKEGON MI 49442

ROBERT E SMITH MD
MEDICAL ARTS CENTER
MUSKEGON MICHIGAN 49440

WILLIAM P STEFFEE MD A
442 VALHALLA CT
ROCHESTER MINN 55901

THOMAS E STONE MD
2110 MARYLAND
MUSKEGON MI 49441

DOLORES B STOREY PH D A
207 LIBERTY LIFE BLDG
MUSKEGON MI 49440

DONALD P STRATTON MD
3535 PARK ST
MUSKEGON MI 49444

F JAMES STUBBART M D
2416 PECK ST
MUSKEGON HEIGHTS MI 49444

RONALD L STUK MD
MED ARTS CTR #103
MUSKEGON MI 49440

RAYMOND E SWANSON MD
1315 RUDDIMAN AVE
NORTH MUSKEGON MI 49445

ROBT D SWEDENBURG MD
1470 PECK STREET
MUSKEGON MICH 49441

LELAND L SWENSON MD
1706 PECK ST
MUSKEGON MICH 49441

H CLAY TELLMAN MD
315 W CLAY
MUSKEGON MI 49440

R K TORREY MD
WESTGATE MEDICAL BLDG
MUSKEGON MI 49441

CHAS M TOY MD
1067 PINE ST
MUSKEGON MICH 49442

WM H TYLER MD
1435 PECK ST
MUSKEGON MICH 49441

C A VANDERVELDE MD
1470 PECK ST
MUSKEGON MICHIGAN 49441

WM C VANGELDER MD
NORTON MEDICAL CTR
MUSKEGON MICH 49441

VIRGILIO VASQUEZ MD
932 FENWOOD CIRCLE
NO MUSKEGON MI 49445

TED VELLENGA A
3789 WICKHAM DR
MUSKEGON MI 49441

GEO A VOIKOS MD
1470 PECK
MUSKEGON MICHIGAN 49441

EDWARD H WAGENAAR MD
3054 HENRY ST
MUSKEGON MICHIGAN 49444

NORMAN L WELCH MD
MERCY HOSP
MUSKEGON MI 49443

WARREN G WHITE JR MD
307 WESTGATE MED TWR
MUSKEGON MICHIGAN 49441

SILAS C WIERSMA MD A
1115 SUMMIT AVE
ST ALBANS W VA 25177

RICHARD T WILCOX MD
1700 CLINTON ST
MUSKEGON MI 49442

BERNARD C WILDGEN MD
MEDICAL ARTS CENTER
MUSKEGON MICHIGAN 49440

CARL A WILKE MD R
QRTS 2 WARREN AFB
CHEYENNE WY 82001

DALE L WILLIAMS MD
3535 PARK ST
MUSKEGON HEIGHTS MI 49444

EDWARD V WILLIAMS MD
2501 BAKER ST
MUSKEGON HEIGHTS MI 49444

B DAVID WILSON MD A
1724 TIMSON LANE
BLOOMFIELD HILLS MI 48013

BURTON J WOLTERS MD
103 MEDICAL ARTS CTR
MUSKEGON MI 49440

NEWAYGO

MAYNARD DEKRYGER MD
220 W PINE ST
FREMONT MI 49412

JESS DE YOUNG MD
111 W DAYTON
FREMONT MI 49412

ROBT W EMERICK MD
BOX 147
FREMONT MI 49412

LAMBERT J GEERLINGS MD L
194 N HILLCREST DR
FREMONT MI 49412

J PAUL KLEIN MD R
40 E PINE ST
FREMONT MI 49412

BROOKER L MASTERS MD
111 W DAYTON
FREMONT MI 49412

ROBT E PAXTON MD
220 W PINE
FREMONT MI 49412

NORMAN PEDELTY MD
38 STATE RD
NEWAYGO MI 49337

TUNIS VANDEN BERG MD
220 W PINE
FREMONT MI 49412

NORTH CENTRAL

THOMAS A BAKER MD A
8783 BRUCE COLLINS CT
STERLING HEIGHTS MI 48077

STANLEY M BECK JR MD
GAYLORD STATE HOME
GAYLORD MI 49735

VERNON B BLAHA MD
P O BOX 414
GRAYLING MICH 49738

JOHN D BOEHM MD R
STATE HOSPITAL
TRAVERSE CITY MI 49684

W E BONTRAGER MD
P O BOX 8
MID MICHIGAN 48647

DONALD D BURKLEY MD
P O BOX 428
GRAYLING MI 49738

D E CHRISTENSEN MD
N MICH TB SAN
GAYLORD MICH 49735

C G CLIPPERT M D R
504 PLUM ST
GRAYLING MI 49738

KEITH D COULTER MD R
1150 TARPON CENTER DR
THE TOWERS-APT #703
VENICE FL 33595

CLARE H CRANDELL MD R
WEST BRANCH MI 48661

PAUL DOSCH MD
300 MCCLELLAN
GRAYLING MICH 49738

KONRAD A GARSTKA MD
401 W GREENLAWN
LANSING MI 48910

HERMAN J HEINEMANN MD
126 E MAIN
GAYLORD MI 49735

BENJ E HENIG M D
604 PENINSULAR
GRAYLING MI 49738

THOS W HOWARTH MD
GLADWIN MI 48624

HUGH M JARDINE M D
WEST BRANCH MI 48661

GEORGE E KIELER MD
ROSCOMMON MICH 48653

ROBERT S LIBKE MD
P O BOX 452
GAYLORD MI 49735

MODESTO LORENZO MD
P O BOX 499
GAYLORD MI 49735

RICHARD E OLSEN MD
LUZERNE MI 48636

CHARLES L OPPY M D
ROSCOMMON MI 48653

R D RUSAK MD
GLADWIN MICHIGAN 48624

GEO L SCHAIBERGER MD
WEST BRANCH MI 48661

S SRINIVASAN MD
500 W CEDAR AVE
GLADWIN MI 48624

STANLEY A STEALY MD L
707 OGEMAW
GRAYLING MI 49738

HAROLD A TIMRECK MD
GLADWIN MI 48624

RUSTICO C TONGCO MD
P O BOX 398
GAYLORD MI 49735

HOWARD E VAN OOSTEN MD
117 BURGESS
WEST BRANCH MICH 48661

LLOYD T WIEGERINK MD
WEST BRANCH MICH 48661

NORTHERN MICHIGAN

ROBT F ALLEN MD
LOCKWOOD HOSP
PETOSKEY MICH 49770

BERNHARD T ALM MD
418 PETOSKEY ST
PETOSKEY MICH 49770

LEO J BINGLEY JR MD
BURNS CLINIC
PETOSKEY MI 49770

BENJ B BLUM MD
1208 E MITCHELL ST
PETOSKEY MICHIGAN 49770

M JOSEPH BOWLER MD
BURN CLINIC MED CTR
PETOSKEY MI 49770

DEAN C BURNS MD
ROUTE 1
PETOSKEY MI 49770

JOSEPH W CHRISTIE MD
BEAVER ISLAND MED CTR
ST JAMES MI 49782

P J CONNAUGHTON MD
BURNS CLINIC
PETOSKEY MICHIGAN 49770

JOS B CONTI MD
924 E MITCHELL ST
PETOSKEY MICH 49770

WM S CONWAY MD
BURNS CLINIC
PETOSKEY MI 49770

HARRY R CUSTER MD
723 PARK AVE
CHARLEVOIX MI 49720

A D DAMSCHROEDER MD
BURNS CLINIC MED CTR
PETOSKEY MI 49770

WILLIAM A DAWSON MD
BURNS CLINIC
PETOSKEY MICHIGAN 49770

GERALD DRAKE MD
511 WAUKAZOO
PETOSKEY MICH 49770

DEAN C ELLIOTT MD
BURNS CLINIC
PETOSKEY MICH 49770

JOHN A FOCHTMAN MD
BURNS CLINIC MED CTR
PETOSKEY MI 49770

BRADFORD S FOSTER MD
226 PARK AVE
PETOSKEY MI 49770

SANDERS A FRYE MD
BURNS CLINIC
PETOSKEY MICHIGAN 49770

JOHN W HALL MD
BURNS CLINIC MED CTR
PETOSKEY MI 49770

ALOYSIUS J HEGENER MD
1020 HOWARD ST
PETOSKEY MICH 49770

H M HILAL MD
BURNS CLINIC MED CTR
PETOSKEY MI 49770

PHILIP E HILL MD
BURNS CLINIC MED CTR
PETOSKEY MI 49770

RATEB HOMSI MD
430 S MAIN ST
CHEBOYGAN MI 49721

JAMES A KILEY MD
348 COUNTRY CLUB RD
PETOSKEY MI 49770

BENJ J KLEINSTIVER MD
517 E LAKE ST
PETOSKEY MI 49770

RICHARD A KNECHT MD
P O BOX 657
PETOSKEY MICHIGAN 49770

R A KUTCIPAL MD
211 SUNSET
PETOSKEY MI 49770

WALTER E LARSON MD
456 S HURON
CHEBOYGAN MICH 49721

NICHOLAS LENTINI MD
CHEBOYGAN MI 49721

JOHN H LIGNELL MD
R 3 DIVISION ST
CHARLEVOIX MICHIGAN 49720

JOHN G LIPSKI MD
ROUTE 4 BOX 48
PETOSKEY MI 49770

ROBT G MARTIN MD
707 BRIDGE
CHARLEVOIX MICHIGAN 49720

VICTOR S MATESKON MD
SUNSET BLVD
PETOSKEY MICH 49770

FREDERICK C MAYNE M D L
P O BOX 387
CHEBOYGAN MI 49721

W L MCCULLOUGH MD
115 CLINTON ST
PETOSKEY MICHIGAN 49770

JOHN E MCENROE MD
1005 E MITCHELL ST
PETOSKEY MICHIGAN 49770

ROBT D MC KNIGHT MD
LINCOLN PLACE
PETOSKEY MICH 49770

ROBERT A MENGEBIER MD
BLANCHARD RD
PETOSKEY MI 49770

JOANNE E MERTZ MD
RESORT PIKE
PETOSKEY MICH 49770

DONALD C MOORE MD
BURNS CLINIC MED CTR
PETOSKEY MI 49770

N THOMAS O KEEFE
516 BAY ST
PETOSKEY MI 49770

JACK R POSTLE MD
ARLINGTON HEIGHTS
PETOSKEY MICH 49770

CARL T RAUCH MD
420 RIVERSIDE DR
CHEBOYGAN MICH 49721

LEONARD W REUS MD
226 PARK AVE
PETOSKEY MICH 49770

JOHN R RODGER MD
BELLAIRE MI 49615

G B SALTONSTALL MD L
112 CLINTON ST
CHARLEVOIX MI 49720

JOHN H SAVORY MD
EAST JORDAN MI 49727

ROBT E SHANAHAN MD
1125 VALLEY VIEW
PETOSKEY MICHIGAN 49770

JOHN A SHEETS MD
BURNS CLINIC
PETOSKEY MI 49770

J E HENRI SIMARD MD
PENNSYLVANIA PLAZA
PETOSKEY MI 49770

ROLLIN F SNIDE MD
125 N MAIN ST
CHEBOYGAN MICHIGAN 49721

RONALD D SNYDER MD
BURNS CLINIC MED CTR
PETOSKEY MI 49770

LOREN C SPADEMAN MD L
524 E BAY ST
HARBOR SPRINGS MI 49740

JOHN H TANTON MD
BURNS CLINIC
PETOSKEY MICHIGAN 49770

ROBT M TAYLOR MD
LINCOLN PLACE
PETOSKEY MICH 49770

VICTOR TSALOFF MD
BURNS CLINIC
PETOSKEY MI 49770

GUSTAV A UHLICH MD
E MITCHELL RD
PETOSKEY MICHIGAN 49770

JERRIAN VAN OELLEN MD
WATER ST
EAST JORDAN MICH 49727

R D VANDEN BRINK MD
BURNS CLINIC
PETOSKEY MI 49770

WILLIAM L WATERS MD
618 E LAKE ST
PETOSKEY MI 49770

RICHARD WEBER MD
ROUTE 4 GRUBB RD
LIMA OHIO 45806

JEAN H WEBSTER MD
200 SUNSET ST
PETOSKEY MICH 49770

KATHRYN D WEBURG MD R
ROUTE 3
PETOSKEY MI 49770

IAN D WILSON MD
611 E LAKE
PETOSKEY MI 49770

BEVERLY A ZELT MD
BURNS CLINIC MED CTR
PETOSKEY MI 49770

OAKLAND

VERNON C ABBOTT MD L
1405 PONTIAC ST BK
PONTIAC MI 48058

MARTIN M ABBRECHT MD
800 S ADAMS RD
BIRMINGHAM MI 48011

H R ACKERMAN JR MD
909 WOODWARD AVE #104
PONTIAC MI 48053

ROBIN ADAIR MD
800 S ADAMS
BIRMINGHAM MICH 48011

FREDERICK M ADAMS MD
800 S ADAMS
BIRMINGHAM MI 48011

SEYMOUR S ADELSON MD
20905 GREENFIELD RD
SOUTHFIELD MI 48075

KRISHAN L AGGARWAL MD
PONTIAC STATE HOSPITAL
PONTIAC MI 48053

ASIRUDDIN AHMAD MD
5770 M-15
CLARKSTON MI 48016

DONALD G ALBERT MD
3535 W 13 MILE RD
ROYAL OAK MICHIGAN 48072

ROBT W ALBRECHT MD
2111 CASS LAKE RD
KEEGO HARBOR MI 48033

YASAR M ALKAR MD
159 PIERCE ST NO 202
BIRMINGHAM MI 48011

ADNAN ALSHABKHOUN MD
33100 12 MILE RD
FARMINGTON MI 48024

F ANDRAKOVICH MD
5554 LAHSER RD
BIRMINGHAM MI 48010

JAIME V ARAGONES MD
134 W UNIVERSITY DR
ROCHESTER MI 48063

FEDERICO A ARCARI MD
606 N WOODWARD AVE
BIRMINGHAM MI 48011

JOSEPH A ARENA JR M D
503 PIERCE
BIRMINGHAM MICHIGAN 48009

ROY E ARONS MD
7133 LINDENMERE
BIRMINGHAM MI 48010

RAYMOND ASHARE MD
35 S JOHNSON
PONTIAC MICHIGAN 48053

SABAH H ATCHU MD
21240 VIRGINIA
SOUTHFIELD MI 48075

HAL G AULIE MD
3535 W 13 MILE RD
ROYAL OAK MI 48072

MOHSEN AVAREGAN MD
6707 HEATHER HEATH LN
BIRMINGHAM MI 48010

MUSTAFA AVCI MD
1990 UNION LAKE
UNION LAKE MI 48085

LORRAINE E AWES MD
500 W HURON ST
PONTIAC MICH 48053

JOHN J BACK MD
21701 W 11 MILE RD
SOUTHFIELD MI 48076

KURT BAIER MD
3816 CRESTLAKE DR
BLOOMFIELD HILLS MI 48013

FREDERICK A BAKER MD L
1936 W ANKLAM RD
TUCSON AZ 85705

JOHN V BALIAN MD
134 W UNIV DR #201
ROCHESTER MI 48063

ROBT J BANNOW MD
880 WOODWARD AVE
PONTIAC MICH 48053

CHAS P BARKER MD
214 WABEEK BLDG
BIRMINGHAM MICH 48011

HOWARD B BARKER MD L
1006 STRATFORD LANE
BLOOMFIELD HILLS MI 48013

NASSER BARKHORDARI MD
29510 FOXGROVE
FARMINGTON MI 48024

PETER P BARLOW MD
31815 SOUTHFIELD RD
BIRMINGHAM MICHIGAN 48009

BRADLEY T BARNES MD
P O BOX 349
ROCHESTER MI 48063

DONALD J BARNES MD L
2134 A VIA PUERTA
LAGUNA HILLS CALIF 92653

CHARLES G BARONE MD
751 CHESTNUT ST
BIRMINGHAM MI 48008

NORMAN L BARR MD
965 ORCHARD RIDGE RD
BLOOMFIELD HILLS MI 48013

JOHN L BARRETT M D
3535 W 13 MILE RD #608
ROYAL OAK MICHIGAN 48072

ROBERT A BARRON MD
4256 ORCHARD LAKE RD
ORCHARD LAKE MI 48033

BRUCE O BAUER MD
3229 WOODWARD AVE
BERKLEY MI 48072

EDWARD G BAUER MD
6756 DESMOND
WATERFORD MI 48095

E WILLIAM BAUER MD
3229 WOODWARD AVE
BERKLEY MI 48072

FRANZ BAUER MD
909 WOODWARD AVE
PONTIAC MICHIGAN 48053

BILLY B BAUMANN MD
2021 KLINGENSMITH #7
PONTIAC MI 48053

SHELBY M BAYLIS MD
35 S JOHNSON
PONTIAC MICHIGAN 48053

WM L BEAUREGARD MD
1665 W 12 MILE RD
BERKLEY MI 48072

OTTO O BECK MD L
701 BARCELONA AVE
VENICE FL 33595

PAUL M BECKER MD
1890 SOUTHFIELD RD
BIRMINGHAM MI 48009

WARREN F BELKNAP MD
1809 S MAIN ST
PLEASANT RIDGE MICH 48069

DURAND BENJAMIN JR MD
35 S JOHNSON 3-D
PONTIAC MI 48053

MERRILL P BENOIT MD
PONTIAC MTR DIV GMC
PONTIAC MICHIGAN 48053

GARY O BERGMAN MD
26615 GREENFIELD
SOUTHFIELD MI 48076

BERNARD O BERMAN MD
1200 N TELEGRAPH RD
PONTIAC MICHIGAN 48053

CHARLES BERMAN MD
461 WEST HURON ST
PONTIAC MI 48053

GILBERT M BERMAN MD
24601 COOLIDGE
OAK PARK MI 48237

JAY BERNSTEIN MD
3601 W 13 MILE RD
ROYAL OAK MI 48072

JOHN T BEUKER MD
15901 W 9 MILE RD #206
SOUTHFIELD MI 48075

HANS A BEYER MD
5675 KOLLY RD
BIRMINGHAM MICHIGAN 48010

OSCAR BIGMAN MD
18597 W 10 MILE RD
SOUTHFIELD MI 48075

JOHN R BIRMINGHAM MD
29632 POND RIDGE
FARMINGTON MI 48024

JAMES R BLAKENEY MD
449 E PIKE ST
PONTIAC MI 48058

JANE BLUE MD
19125 HILLCREST
BIRMINGHAM MICH 48009

MALCOLM O BOESKY MD
26789 WOODWARD AVE
HUNTINGTON WDS MICH 48070

CHESTER J BOGUCKI MD
MICH DEPT OF HLTH
155 N SAGINAW ST
CRIPPLED CHLDRN DIV
PONTIAC MI 48058

OSHIN BOHJALIAN MD
16001 W NINE MILE RD
SOUTHFIELD MI 48075

THORNTON I BOILEAU MD
2075 E 14 MILE RD
BIRMINGHAM MICH 48008

ALAN E BOLTON MD
25101 COOLIDGE
OAK PARK MI 48237

ROBT M BOOKMYER MD
31815 SOUTHFIELD RD
BIRMINGHAM MICH 48009

PETER E BOSS MD
15901 W NINE MILE RD
SOUTHFIELD MI 48075

ROMAN E BOUCHER MD
4200 N WOODWARD AVE
ROYAL OAK MICHIGAN 48072

NABIL R BOUTROS MD
1100 W UNIVERSITY DR
ROCHESTER MI 48063

CHAS L BOWERS MD
909 WOODWARD AVE
PONTIAC MI 48053

NEAL C BRADY MD
3535 W 13 MILE RD
ROYAL OAK MICHIGAN 48072

SANDER J BREINER MD
7410 FRANKLIN RD
BIRMINGHAM MI 48010

BARRY S BRONSON MD
4541 PINE VILLAGE DR
ORCHARD LAKE MI 48033

WM W BRONSON MD
444 W UNIVERSITY DR
ROCHESTER MI 48063

ARNOLD L BROWN MD
35 S JOHNSON
PONTIAC MICH 48053

DONALD BROWN MD
1100 W UNIVERSITY DR
ROCHESTER MI 48063

RICHARD T BROWNE MD
880 WOODWARD #105
PONTIAC MI 48053

HENRY G BRYAN MD
22100 COOLIDGE
OAK PARK MICHIGAN 48237

JOHN B BRYAN MD
4045 W 13 MILE RD
ROYAL OAK MICHIGAN 48072

F W BRYANT MD
3535 W 13 MILE RD
ROYAL OAK MI 48072

ALEXANDER S Z BUDD MD
P O BOX 275
BLOOMFIELD HILLS MI 48013

ROBERT C BUEHRIG
5790 M 15
CLARKSTON MICH 48016

R W BULLARD JR MD
5790 M 15
CLARKSTON MICHIGAN 48016

WILLIAM G BUNTO MD
970 IRONWOOD APT 352
ROCHESTER MI 48063

JOHN H BURGER MD
31815 SOUTHFIELD RD
BIRMINGHAM MICHIGAN 48009

BRUNO BURGESS MD
29250 LONGVIEW ST
WARREN MICHIGAN 48093

CHAUNCEY G BURKE MD L
35 W HURON ST
PONTIAC MI 48058

JOSEPH F BURTKA MD
26505 JOHN R ST
MADISON HGTS MI 48071

ROBT A BYBERG MD
3535 W 13 MILE RD
ROYAL OAK MI 48072

G P CABRERA MD
3535 W 13 MILE RD
ROYAL OAK MI 48072

ETHEL T CALHOUN MD L
707 LAKEVIEW AVE
BIRMINGHAM MI 48009

DAVID R CALVER MD A
PONTIAC GEN HOSPITAL
PONTIAC MI 48053

MALCOLM D CAMPBELL MD R
435 RIDGEWOOD RD
KEY BISCAYNE FL 33149

JUAN C CARIONI MD
25101 COOLIDGE
OAK PARK MI 48237

JOS D CARLISLE MD
3535 W 13 MILE RD
ROYAL OAK MICHIGAN 48072

BARBARA F CARLSON MD
33120 W 12 MILE RD
FARMINGTON MI 48024

G B CARPENTER JR MD
622 N WOODWARD
BIRMINGHAM MICHIGAN 48011

JOYCE M CARROW MD A
1469 HIGHMOOR WAY
BLOOMFIELD HILLS MI 48013

EDWARD F CASHMAN MD
15908 GLASTONBURY RD
DETROIT MI 48223

NICANOR F CASTEDO MD
4189 SUNNINGDALE DR
BLOOMFIELD HILLS MI 48013

RICARDO E CECCHINI MD
4415 PARK LANE CT
BLOOMFIELD HILLS MI 48008

ANTHONY F CEFAI MD
35 S JOHNSON
PONTIAC MICH 48053

C T CERKEZ MD
134 W UNIVERSITY
ROCHESTER MI 48063

DOUGLAS CHANDLER MD
1890 SOUTHFIELD RD
BIRMINGHAM MICH 48009

JOS H CHANDLER MD
309 NORTHLAND MED BLDG
SOUTHFIELD MICHIGAN 48075

JAMES T CHENG MD R
9 BUTTERWORTH DR
MORRISTOWN N J 07960

NICHOLAS CHERUP MD
PONTIAC GENERAL HOSP
PONTIAC MICHIGAN 48053

MERLE A CHILDERS MD
134 W UNIVERSITY DR
ROCHESTER MI 48063

NELDAGAE CHISA MD
26711 WOODWARD AVE
HUNTINGTON WDS MICH 48070

CYNTHIA CHOW MD
134 W UNIV DR #308
ROCHESTER MI 48063

TAI CHUNG MD
PONTIAC STATE HOSP
PONTIAC MI 48053

HARRIET A CLARKE MD
900 WOODWARD AVE
PONTIAC MI 48053

ALAN L CLINE MD
4299 ROSEBERRY
DRAYTON PLAINS MICH 48020

THOS H COBB MD
880 WOODWARD AVE
PONTIAC MICH 48053

CARL J COHEN MD
909 WOODWARD AVE #118
PONTIAC MI 48053

DANIEL H COHEN MD
20905 GREENFIELD RD
SOUTHFIELD MI 48075

JACK J COHEN MD
17226 ADRIAN RD
SOUTHFIELD MICHIGAN 48075

LEWIS COHEN MD
26602 DUNDEE RD
HUNTINGTON WOODS MI 48070

MELVIN F COHEN MD
28590 RIVERCREST DR
SOUTHFIELD MI 48075

EDWARD F COLLINS MD
OAKLAND COUNTY HOSP
PONTIAC MI 48053

FRANK J CONDON MD L
876 LAKEPOINTE RD
GROSSE PTE PARK MI 48230

CECIL D CONRAD MD
3027 N WOODWARD AVE
ROYAL OAK MICH 48072

GERALD F CONWAY MD
501 BEAUMONT MED BLDG
ROYAL OAK MI 48072

NORTON J COOKSEY MD
3535 W 13 MILE RD
ROYAL OAK MICHIGAN 48072

ROY V COOLEY MD
318 S BLVD WEST
PONTIAC MICHIGAN 48053

EDMOND L COOPER MD
4200 N WOODWARD AVE
ROYAL OAK MI 48072

ROBT S COOPER MD
3027 N WOODWARD AVE
ROYAL OAK MICH 48072

K E CORRIGAN PH D A
300 WARREN COURT
BIRMINGHAM MI 48009

RALPH J COSKEY MD
21180 INDEPENDENCE
SOUTHFIELD MI 48076

ROBERT W COUNTS MD
155 REDDINGWOOD DR
ROCHESTER MI 48063

ENRIQUE D COVANI MD A
PONTIAC GENERAL HOSP
PONTIAC MI 48053

PAUL D CROISSANT MD
445 W HURON ST
PONTIAC MI 48053

ROGER E CRUM MD
35 S JOHNSON
PONTIAC MICHIGAN 48053

MICHAEL J CURTIN MD
4210 W NEWLAND
ORCHARD LAKE MI 48033

ROBERT M CUTLER MD
909 WOODWARD AVE
PONTIAC MI 48053

WM M CUTLER MD
800 S ADAMS RD
BIRMINGHAM MICH 48011

N P CZAJKOWSKI MD
189 TOWNSEND
BIRMINGHAM MI 48009

CARL W DAHLGREN MD L
3023 ORCHARD LAKE
KEEGO HARBOR MICH 48033

JAMES D DARNLEY MD
26711 WOODWARD AVE
HUNTINGTON WOODS MI 48070

DONALD N DAWSON MD
PONTIAC STATE HOSP
PONTIAC MI 48053

RICHARD C DAYTON MD
427 W UNIVERSITY DR
ROCHESTER MICHIGAN 48063

MURRAY N DEIGHTON MD
23023 ORCHARD LAKE RD
FARMINGTON MICHIGAN 48024

MALCOLM J DELANEY MD
23023 ORCHARD LAKE RD
FARMINGTON MICHIGAN 48024

HILBERT H DE LAWTER MD
3535 W 13 MILE RD
ROYAL OAK MICHIGAN 48072

JACOB B DELEVIE MD
35 W HURON ST #700
PONTIAC MI 48058

J WILLIAM DERR MD
3535 W 13 MILE RD #506
ROYAL OAK MI 48072

WM L DEUTSCH MD
600 W 11 MILE RD
ROYAL OAK MICH 48067

H LOUIS DE VITO MD
3115 ANGELUS DR
PONTIAC MICHIGAN 48055

DAVID H DINGER MD
2561 ELIZABETH LK RD
PONTIAC MI 48054

WILLIAM R DITO MD
PONTIAC GENERAL HOSP
PONTIAC MICHIGAN 48053

EDWIN J DOBSKI MD
909 WOODWARD AVE
PONTIAC MICH 48053

LOUIS E DOERR JR MD
1413 S WASHINGTON
ROYAL OAK MI 48067

MASSOUD DOROSTKAR MD
45455 HARMONY LANE
BELLEVILLE MI 48111

JOHN M DORSEY JR MD
31815 SOUTHFIELD RD
BIRMINGHAM MICH 48009

DALE R DREW MD
909 WOODWARD AVE
PONTIAC MICHIGAN 48053

EDWARD J DROGOWSKI MD
134 W UNIVERSITY DR
ROCHESTER MICHIGAN 48063

PETER A DUHAMEL MD
134 W UNIV DR #103
ROCHESTER MICHIGAN 48063

GREGG L DUNLAP MD
2870 ORCHARD LAKE RD
KEEGO HARBOR MICH 48033

GERALD G DURAK MD
7105 SHERWOOD DR
BIRMINGHAM MICHIGAN 48010

NORMAND E DUROCHER MD
35 S JOHNSON
PONTIAC MICH 48053

ROBT W DUSTIN MD
122 E BROWN ST
BIRMINGHAM MI 48011

K ESWARA DUTT MD A
PONTIAC GENERAL HOSP
PONTIAC MI 48053

HOWARD J DWORKIN MD
3601 W 13 MILE RD
ROYAL OAK MI 48072

MILAGROS T EBRED MD
31772 ALLERTON DR
BIRMINGHAM MI 48009

EDWARD E ELDER JR MD
1116 VOORHEIS
PONTIAC MICH 48053

ROBT N ELLIOTT MD
3535 W 13 MILE RD
ROYAL OAK MI 48072

RICHARD F ELTON MD
15901 W 9 MILE RD #620
SOUTHFIELD MI 48075

CECIL W ELY JR MD
189 TOWNSEND #200
BIRMINGHAM MI 48011

Z F ENDRESS MD
35 S JOHNSON
PONTIAC MI 48053

JOHN B ENGEL MD R
15463 ASBURY PARK
DETROIT MI 48227

JACK F ENSROTH MD
1100 N WOODWARD
BIRMINGHAM MICHIGAN 48011

NEVIT O ERGIN MD
860 LONE PINE RD
BLOOMFIELD HILLS MI 48013

JOHN D ESSLINGER M D
622 N WOODWARD AVE
BIRMINGHAM MICH 48011

VALENTINE ESSLINGER MD
3535 W 13 MILE RD
ROYAL OAK MI 48072

A P ESTANISLAO MD
3329 WEST SHORE
ORCHARD LAKE MI 48033

GEO S EVSEEFF MD
3535 W 13 MILE RD
ROYAL OAK MI 48072

LOUIS A FABIAN MD
2351 SOMERSET
TROY MI 48084

JALIL FARAH MD
3525 BROOKSIDE
BLOOMFIELD HILLS MI 48013

ROBERT A FARGHER MD
660 SOUTH BOULEVARD E
PONTIAC MI 48053

PAUL FECKO MD
189 TOWNSEND #302
BIRMINGHAM MI 48009

MICHAEL J FEDERMAN MD
23551 SUTTON DR
SOUTHFIELD MI 48075

JEROME E FELDSTEIN MD
502 N CROOKS RD
CLAWSON MI 48017

OSCAR U FERNANDO MD
23467 PLUMBROOKE DR
SOUTHFIELD MI 48075

ALFREDO FERREYRA MD
3-F PONTIAC MED BLDG
35 S JOHNSON ST

PONTIAC MI 48053

KRIKOR FICICI MD
602 BURTMAN DR
TROY MI 48084

WM F FIDLER MD
1200 N TELEGRAPH RD
PONTIAC MI 48053

L JEROME FINK MD
500 W HURON ST
PONTIAC MICHIGAN 48053

LIONEL FINKELSTEIN MD
577 ARLINGTON
BIRMINGHAM MI 48009

N S FIRESTONE MD
23023 ORCHARD LAKE RD
FARMINGTON MI 48024

GORDON R A FISHMAN MD
25721 COOLIDGE
OAK PARK MI 48237

WM J FLAHARTY MD
25000 W TEN MILE RD
SOUTHFIELD MICH 48075

A G FLEURQUIN MD
4311 STONELEIGH
BLOOMFIELD HILLS MI 48013

JOHN R FLICK MD
120 W SECOND ST
ROYAL OAK MICH 48067

RALPH M FOX MD
800 S ADAMS RD
BIRMINGHAM MICHIGAN 48011

ARTHUR M FREEDMAN MD
20100 WEST 12 MILE RD
SOUTHFIELD MI 48075

JAMES L FREY MD
NORTHLAND MED BLDG#704
SOUTHFIELD MI 48075

HAROLD A FURLONG MD L
35 S JOHNSON AVE
PONTIAC MI 48053

JOHN A FUSHMAN MD
4200 N WOODWARD AVE
ROYAL OAK MICHIGAN 48072

HOWARD B GABA MD
21721 DEQUINDRE
HAZEL PARK MI 48030

BEN GABER MD
511 PIERCE ST
BIRMINGHAM MI 48009

F GAENSBAUER MD
880 WOODWARD #108
PONTIAC MI 48053

R A GAGLIARDI MD
2515 ENDSLEIGH DR
BIRMINGHAM MI 48010

GILBERT J GALENS MD
31815 SOUTHFIELD RD
BIRMINGHAM MICHIGAN 48009

RICHARD R GALPIN MD
525 SOUTHFIELD RD
BIRMINGHAM MICH 48009

TELESFORO E GARCIA MD A
PONTIAC GEN HOSP
PONTIAC MI 48053

MAX J GARBER M D
23023 ORCHARD LAKE RD
FARMINGTON MICHIGAN 48024

DONALD M GARLAND MD
PONT MOTOR GLENWOOD AV
PONTIAC MI 48053

JOANN M GATES MD
65 S TELEGRAPH RD
PONTIAC MI 48053

RICHARD C GAUSE MD
31815 SOUTHFIELD RD
BIRMINGHAM MICHIGAN 48009

NORMAN F GEHRINGER MD
2335 S COMMERCE RD
WALLED LAKE MI 48088

EDGAR J GEIST JR MD
1500 WALTON BLVD
ROCHESTER MICHIGAN 48063

JAMES W GELL MD
35 S JOHNSON AVE
PONTIAC MICH 48053

LAZARO GELSTEIN MD
909 WOODWARD AVE
PONTIAC MI 48053

EUGENE A GELZAYD MD
20905 GREENFIELD RD
SOUTHFIELD MI 48075

GEORGE R GERBER MD
310 W UNIVERSITY DR
ROCHESTER MI 48063

FRANK B GERLS MD L
4425 MOTORWAY DR
PONTIAC MI 48054

NORMAN J GERSABECK MD
29226 ORCHARD LAKE RD
FARMINGTON MI 48024

PIERRE F GIAMMANCO MD
880 WOODWARD AVE #110
PONTIAC MI 48053

WELLINGTON C GIBSON MD
216 COMMERCE ST
MILFORD MICH 48042

MATTHEW J GILL MD
1030 RIKER BLDG
PONTIAC MI 48058

HAROLD GLEN MD
26684 GRAND RIVER
DETROIT MICHIGAN 48240

DOROTHY M GOERNER MD A
338 PILGRIM
BIRMINGHAM MI 48009

DARRYL T GOLDBERG MD
26789 WOODWARD AVE 101
HUNTINGTON WOODS MI 48070

HOWARD S GOLDBERG MD
24777 GREENFIELD RD
SOUTHFIELD MI 48075

ROBERT GOLDBERGER MD
PONTIAC GENERAL HOSP
PONTIAC MI 48053

HERBERT GOLDSTEIN MD
22100 COOLIDGE HWY
OAK PARK MI 48237

ROGER L GONDA MD
15901 W 9 MILE RD #110
SOUTHFIELD MI 48075

WAYNE T GOOD MD
3306 AUBURN RD
AUBURN HEIGHTS MICH 48057

NORMAN J GOODE JR MD
2000 SECOND AVE
DETROIT MI 48226

CLAYTON H GORDON MD
1099 N CRANBROOK RD
BIRMINGHAM MICH 48009

SEYMOUR GORDON MD
3535 W 13 MILE RD
ROYAL OAK MI 48072

JOSEPH G GOUGH MD
900 WOODWARD AVE
PONTIAC MI 48053

PAUL L GRADOLPH MD
23338 WOODWARD AVE
FERNDALE MI 48220

P MIGUEL A GRANADOS MD
30838 BARRINGTON
WESTLAND MI 48185

J DONALD GREEN MD
6405 TELEGRAPH RD
BLDG D SUITE 2

BIRMINGHAM MI 48010

RALPH S GREEN MD
23300 GREENFLD RD #223
OAK PARK MI 48237

WILLARD M GREEN MD
35 S JOHNSON
PONTIAC MICH 48053

FRANK J GREENE MD
2655 GULFVIEW DR #202
TROY MI 48084

JOHN N GREKIN MD
15901 W 9 MILE RD #620
SOUTHFIELD MI 48075

THOS O GREKIN MD
3535 W 13 MILE RD
ROYAL OAK MI 48072

M A GRISHKOFF MD
909 WOODWARD AVE #15
PONTIAC MI 48053

FREDERICK J GROSE MD
23077 GREENFIELD
SOUTHFIELD MI 48075

SOLOMON C GROSSMAN MD
26339 WOODWARD AVE
HUNTINGTON WOODS MI 48070

LOVELL I GUANCO MD
140 ELIZABETH LAKE RD
PONTIAC MI 48053

FERIDUN GUROL MD
32316 GRAND RIVER
FARMINGTON MI 48024

DAVID C GUSTAFSON MD
3535 W 13 MILE RD
ROYAL OAK MI 48072

EVERETTE GUSTAFSON MD
35 S JOHNSON
PONTIAC MICH 48053

ROSEMARIE B GUSTILO MD
PONTIAC STATE HOSP
PONTIAC MI 48053

MARIA A GUTIERREZ MD
P O BOX 587
BLOOMFIELD HILLS MI 48013

MEYER A GUTTERMAN MD
25085 COOLIDGE HWY
OAK PARK MI 48237

MERLE A HAANES MD
909 WOODWARD AVE
PONTIAC MICHIGAN 48053

GILBERT W HAGUE MD
739 WESTVIEW RD
BLOOMFIELD HILLS MI 48013

JOHN HALICKI MD
PONTIAC STATE HOSP
PONTIAC MI 48053

LEE H HALSTED MD
23023 ORCHARD LAKE RD
FARMINGTON MICHIGAN 48024

GEORGE J HAMBALGO MD
4045 WEST 13 MILE RD
ROYAL OAK MI 48072

JOEL I HAMBURGER MD
20905 GREENFIELD RD
SOUTHFIELD MICHIGAN 48075

QUENTIN P HAMILTON MD
20905 GREENFIELD
SOUTHFIELD MICHIGAN 48075

MADLIN HAN MD
3725 AUBURN RD
AUBURN HEIGHTS MICH 48057

JOSEPH W HANCE MD
210 COVE CREEK LN
HOUSTON TEXAS 77042

M SHAMSUL HAQUE MD
6405 TELEGRAPH RD
BIRMINGHAM MI 48010

LEWIS G HARMON MD
1775 E 14 MILE RD
BIRMINGHAM MICH 48008

JOHN A HARROLD MD
534 FRANKLIN RD
PONTIAC MICHIGAN 48053

MARTIN HART MD
880 N WOODWARD AVE #19
PONTIAC MI 48053

CHARLES F HARTLEY MD
3535 W 13 MILE RD
ROYAL OAK MI 48072

CAMPBELL HARVEY MD L
SAN MIGUEL DE ALLENDE

APTADO POSTAL 127
GUANAJUATO MEXICO

CARL M HASEGAWA MD
2953 PALMERSTON
TROY MI 48084

JOHN B HASSBERGER MD L
620 N WOODWARD AVE
BIRMINGHAM MICH 48011

WM S HATHAWAY MD R
425 WALNUT ST
ROCHESTER MI 48063

H S HAYDEN PH D A
300 WARREN COURT
BIRMINGHAM MI 48009

MANES S HECHT MD
26711 WOODWARD
HUNTINGTON WOODS MI 48070

JAMES E HENDERSON MD
909 WOODWARD AVE
PONTIAC MICHIGAN 48053

WORTH W HENDERSON MD
1307 S WASHINGTON
ROYAL OAK MICH 48067

OWEN S HENDREN MD L
2672 W CASAS DRIVE
TUCSON ARIZONA 85704

FRANK R HENDRICKS MD
21701 W 11 MILE RD
SOUTHFIELD MICHIGAN 48075

COLONEL R HENRY MD L
125 W NINE MILE RD
FERNDALE MI 48220

EDWARD L HERMAN MD
909 WOODWARD
PONTIAC MI 48053

CHARLES R HERMES MD
4680 DIXIE HIGHWAY
DRAYTON PLAINS MI 48020

DONALD J HEYBOER MD
ST JOSEPH MERCY HOSP
PONTIAC MI 48053

WILLIAM E HILL MD
534 FRANKLIN RD
PONTIAC MI 48053

SIDNEY J HILLENBERG MD
23077 GREENFIELD
SOUTHFIELD MI 48075

C JACK HIPPS MD
17100 W 12 MILE RD
SOUTHFIELD MI 48076

ABEN HOEKMAN MD R
BOX 66
COMINS MI 48619

LAWRENCE O HOFFMAN MD
27600 FARMINGTON
FARMINGTON MI 48024

LOUIS HOFFMAN MD
21701 W 11 MILE RD #9
SOUTHFIELD MI 48075

KEITH M HOLMES MD
880 WOODWARD AVE
PONTIAC MI 48053

MELVIN HOPKINS JR MD
900 BALDWIN AVE
PONTIAC MI 48055

WM J HOPKINS MD
17000 W EIGHT MILE RD
SOUTHFIELD MICHIGAN 48075

WILLARD E HOUSE MD
FORD MOTOR CO
P O BOX 238

UTICA MI 48087

MARJORIE E HOWARD MD
30500 GLENMUER RD
FARMINGTON MI 48024

LYNN E HOWELL MD
909 WOODWARD AVE
PONTIAC MICHIGAN 48053

MYROSLAW HRUSHKA MD
PONTIAC STATE HOSP
PONTIAC MI 48053

JOHN J HSU MD
35 WEST HURON ST
PONTIAC MI 48058

YUAN-CHAO HUANG MD
606 N WOODWARD AVE
BIRMINGHAM MI 48011

JOHN R HUBERT MD
880 WOODWARD AVE
PONTIAC MI 48053

JAMES V HUEBNER MD
287 WINRY
ROCHESTER MI 48063

ARAM A IGNATIUS MD
1915 E NINE MILE RD
FERNDALE MI 48220

H J INCHAUSTEGUI MD
4045 W 13 MILE RD
ROYAL OAK MI 48072

JOHN A INGOLD MD
3535 W 13 MILE RD #608
ROYAL OAK MI 48072

HERBERT L ISAAC MD
909 WOODWARD AVE 115
PONTIAC MI 48053

JOHN W ISON MD
16019 MARGUERITE
BIRMINGHAM MI 48009

PHILIP J JACKSON MD
6960 POST OAK DR
BIRMINGHAM MI 48010

RODMAN C JACOBI MD
91 S WASHINGTON
OXFORD MICH 48051

HERBERT S JACOBSON MD
20905 GREENFIELD #400
SOUTHFIELD MI 48075

NANETTE JAGNOW MD
525 SOUTHFIELD RD
BIRMINGHAM MICHIGAN 48009

ROBT E JAMES JR MD
2561 ELIZABETH LK RD
PONTIAC MI 48054

THOMAS P JAMES MD
2411 PINEVIEW
PONTIAC MI 48053

HENRY L JENKINS MD
161 STATE ST
PONTIAC MICHIGAN 48053

JEFFERY M JENNINGS MD
202 WALNUT BLVD
ROCHESTER MI 48063

JOHN A JENNINGS MD
3535 W 13 MILE RD
ROYAL OAK MI 48072

CLARE G JOHNSON MD
2260 PRIVATE DR
PONTIAC MI 48055

GARFIELD JOHNSON JR MD
35 S JOHNSON
PONTIAC MI 48053

J FREDERIC JOHNSON MD
23760 N WOODWARD
PLEASANT RIDGE MICH 48069

JAMES W JOHNSON MD
2581 MCCLINTOCK RD
PONTIAC MI 48053

ROBERT H JOHNSON MD
310 W UNIVERSITY DR
ROCHESTER MI 48063

CYRIL D JONES MD
800 IRONWOOD DR #321
ROCHESTER MI 48063

ANTOINE L JOSEPH MD
4045 W 13 MILE RD
ROYAL OAK MI 48072

JOHN A JOYCE MD
134 W UNIVERSITY
ROCHESTER MICHIGAN 48063

SAMBA JUNG MD
5571 PRKVIEW DR C1#304
CLARKSTON MI 48016

E PATRICK JURAS MD
2036 STONE HOLLOW CT
BLOOMFIELD HILLS MI 48013

DONALD B JURY MD R
7765 ESTEREL DRIVE
LAJOLLA CA 92037

GEORGE KADIAN MD
18211 W 12 MILE RD
LATHRUP VILLAGE MI 48076

ROBERT L KAMM MD
240 DAINES ST
BIRMINGHAM MI 48009

F S KAPADIA MD
4299 ROSEBERRY
DRAYTON PLAINS MI 48020

MICHAEL KAPRIELIAN MD
189 TOWNSEND #210
BIRMINGHAM MI 48011

TURGUT A KARABEY MD
159 PIERCE ST
BIRMINGHAM MI 48011

RAYMOND J KARAKUC MD
35 S JOHNSON ST
PONTIAC MI 48053

N NACI KARCA MD
5045 CHARING CROSS
BLOOMFIELD HILLS MI 48013

G REZA KARIMIPUUR MD
909 WOODWARD AVE #21
PONTIAC MI 48053

SIDNEY F KATZ MD
1379 STUYVESANT RD
BIRMINGHAM MI 48010

JACK M KAUFMAN MD
26711 WOODWARD AVE
HUNTINGTON WOODS MI 48070

SHERMAN A KAY MD
26657 WOODWARD AVE
HUNTINGTON WOODS MI 48070

LOUIS L KAZDAN MD
13801 W NINE MILE RD
OAK PARK MI 48237

EUGENE J KEEFFE MD
880 WOODWARD AVE
PONTIAC MI 48053

MAXIMILIAN KELIN MD
3713 ELIZABETH LK RD
PONTIAC MI 48054

ANTHONY S KELLER MD
1705 BEDFORD SQ #102
ROCHESTER MI 48063

FELIX J KEMP MD
880 WOODWARD AVE
PONTIAC MICH 48053

H F KENDRICK JR MD
35 S JOHNSON
PONTIAC MICHIGAN 48053

EDWIN C KERR MD
32749 FRANKLIN RD
FRANKLIN MICHIGAN 48025

HANS J KETTLER MD
25160 EDGEMONT RD
SOUTHFIELD MICHIGAN 48075

SATISH C KHANEJA MD
140 ELIZABETH LAKE RD
PONTIAC MI 48053

BAHRAM KHODADADEH MD
4400 ORCHARD LAKE RD
ORCHARD LAKE MI 48033

THEODORE W KILAR MD
503 PIERCE ST
BIRMINGHAM MI 48009

GEORGE KINSLEY MD
909 WOODWARD AVE
PONTIAC MICHIGAN 48053

ARTHUR KLASS MD
26657 WOODWARD AVE
HUNTINGTON WOODS MI 48070

JEROME H KLEGMAN MD
17000 W EIGHT MILE RD
SOUTHFIELD MICHIGAN 48075

MARVIN E KLEIN MD
18400 W 12 MILE RD
SOUTHFIELD MI 48075

H A KLEWICKI MD
22720 WOODWARD
FERNDALE MI 48220

EDWIN M KNIGHTS JR MD
16001 9 MILE RD
SOUTHFIELD MICHIGAN 48075

RICHARD S KNOX MD
422 WASHINGTON SQ PL
ROYAL OAK MI 48067

WM H KOEHLER MD
3535 W 13 MILE RD
ROYAL OAK MICHIGAN 48072

KARL F KOERNER MD
1820 CROOKS RD
TROY MI 48084

LAWRENCE KOLTONOW MD
304 NORTHLAND MED BLDG
SOUTHFIELD MICHIGAN 48075

LARRY L KOMPUS MD
500 W HURON ST
PONTIAC MI 48053

JAMES G KORNMESSER MD
27600 FARMINGTON RD
FARMINGTON MICHIGAN 48024

UJAMLAL C KOTHARI MD
PONTIAC STATE HOSP
PONTIAC MI 48053

CLIFFORD S KOZLOW MD
1201 BROOKWOOD
BIRMINGHAM MI 48009

L ANGE KOZLOW MD
3535 W THIRTEEN MI RD
ROYAL OAK MI 48072

MICHAEL C KOZONIS MD
880 WOODWARD AVE
PONTIAC MICHIGAN 48053

ELMER J KOZORA MD
17650 W 12 MILE RD
SOUTHFIELD MICHIGAN 48075

MARK KRANE MD
2335 S COMMERCE RD
WALLED LAKE MI 48088

ALFRED M KREINDLER MD
200 ELM ST
BIRMINGHAM MI 48008

BRUCE A KRESGE MD
1500 WALTON BLVD
ROCHESTER MICHIGAN 48063

NORMAN N KRIEGER MD
402 UNION ST
MILFORD MICHIGAN 48042

DON R KROHN MD
27600 FARMINGTON RD
FARMINGTON MI 48024

HENRY KRYSTAL MD
20905 GREENFIELD RD
SOUTHFIELD MI 48075

ELI H KUHEL MD
25415 SOUTHFIELD RD
SOUTHFIELD MICHIGAN 48075

ANNE K KUHN MD
4203 W 13 MILE RD
ROYAL OAK MICH 48072

ROBT E KUHN MD
4203 W 13 MILE RD
ROYAL OAK MICH 48072

G KRISHNA KUMAR MD
16216 W 13 MILE RD
BIRMINGHAM MI 48009

CARL E KUNTZMAN MD
134 W UNIVERSITY DR
ROCHESTER MI 48063

RUBEN KURNETZ MD
511 PIERCE ST
BIRMINGHAM MI 48009

MYRON M LABAN MD
WM BEAUMONT MED BLDG
ROYAL OAK MI 48072

JAMES E LADD MD
503 PIERCE ST
BIRMINGHAM MICHIGAN 48009

SOOSUP LAH MD A
ST JOSEPH MERCY HOSP
PONTIAC MI 48053

PAUL T LAHTI MD
3600 W 13 MILE RD
ROYAL OAK MICH 48072

ALVIN G LAMBERT MD
3535 W 13 MILE 505
ROYAL OAK MI 48072

FRANCIS W LANARD MD
31504 SUNSET DR
BIRMINGHAM MI 48009

LAWRENCE A LAPORTE MD
356 N CLIFTON RD
BIRMINGHAM MI 48010

ALVIN R LARSON MD
880 WOODWARD AVE
PONTIAC MICH 48053

PHILIP J LAUX JR MD
3027 N WOODWARD
ROYAL OAK MICH 48072

JAMES M LAWSON MD
17100 W 12 MILE RD
SOUTHFIELD MI 48075

ANTONIO A LAXA MD
3329 WEST SHORE
ORCHARD LAKE MI 48033

CHAS A LEACH MD
525 SOUTHFIELD RD
BIRMINGHAM MI 48009

ETTA LINK LEAHY MD R
1616 WILTSHIRE
BERKLEY MI 48072

HAHN J LEE MD
24601 COOLIDGE
OAK PARK MI 48237

LEONARD H LERNER MD
26615 GREENFIELD
SOUTHFIELD MI 48076

NASI D LESSANI MD
27600 FARMINGTON RD
FARMINGTON MI 48024

BRUCE T LESSIEN MD
4045 W THIRTEEN MILE
ROYAL OAK MICHIGAN 48072

MURRAY B LEVIN MD
7046 CATHEDRAL DR
BIRMINGHAM MICHIGAN 48010

ALLAN J LEVINE MD
WM BEAUMONT HOSP
3601 W 13 MILE RD

ROYAL OAK MI 48072

BERNARD LEVINE MD
25835 PARKWOOD DR
HUNTINGTON WOODS MI 48070

MARVIN B LEVY MD
23200 WOODWARD AVE
FERNDALE MI 48220

SOL M LEWIS MD L
541 W OAKRIDGE
FERNDALE MI 48220

JOHN H LIBCKE MD
PONTIAC GEN HOSP
PONTIAC MI 48053

HARRY E LICHTWARDT MD
3535 W 13 MILE RD
ROYAL OAK MI 48072

JOHN R LICHTWARDT MD
3535 W 13 MILE RD
ROYAL OAK MI 48072

EDWARD G LIEVOIS MD
289 WESTBOURNE DR
BIRMINGHAM MICH 48010

RICHARD J LILLY MD
25336 CASTLEREIGH
FARMINGTON MICH 48024

DOMINIC LIM MD
PONTIAC STATE HOSP
PONTIAC MI 48053

ANTONIO G LIMIA MD
503 PIERCE
BIRMINGHAM MI 48009

HENRY Y LIU MD
16001 W NINE MILE RD
SOUTHFIELD MI 48075

HAROLD W LONGYEAR MD
3535 W 13 MILE RD
ROYAL OAK MI 48072

JAMES W LOWELL MD
880 WOODWARD AVE
PONTIAC MI 48053

ANTHONY J LOWERY MD R
4966 GEORGETOWN CT
WATERFORD MI 48095

RAY O LUNDY MD A
PONTIAC GEN HOSPITAL
PONTIAC MI 48053

AARON LUPOVITCH MD
6707 EDINBOROUGH
BIRMINGHAM MI 48010

A S LUSSOS MD
2707 BRIDLE RD
BLOOMFIELD HILLS MI 48013

BYRON B LUTES MD
1961 LONG LK SHORE DR
ORCHARD LAKE MI 48033

BLAGOY LUTIKOF MD
1727 CEDAR HILL DR
BIRMINGHAM MI 48010

ROBT T LYONS MD
CHIEF-INT MED
PONTIAC GEN HOSP

PONTIAC MICH 48053

GEORGE S MACKEY MD
3601 W 13 MILE RD
ROYAL OAK MI 48072

JOHN J MACNEIL MD
2075 E 14 MILE RD
BIRMINGHAM MI 48008

B H MACPHERSON MD
880 WOODWARD AVE #111
PONTIAC MI 48053

IVAN J MADER MD
465 DUNSTON RD
BLOOMFIELD HILLS MI 48013

DELMAR H MAHRT MD
3601 WEST 13 MILE RD
WM BEAUMONT HOSP

ROYAL OAK MI 48072

HENRY W MAICKI MD
5857 DUNMORE CT
ORCHARD LAKE MI 48033

CHARLES A MAIN JR MD
2143 BRENTHAVEN DR
BLOOMFIELD HILLS MI 48013

WM F MALARNEY MD
880 WOODWARD AVE #106
PONTIAC MI 48053

HOWARD N MANZ MD
23023 ORCHARD LAKE RD
FARMINGTON MICHIGAN 48024

OLIVER J MARCOTTE MD R
25000 W TEN MILE RD
SOUTHFIELD MI 48075

R RALPH MARGULIS MD
503 PIERCE ST
BIRMINGHAM MICHIGAN 48009

JOHN M MARKLEY MD
4120 SANDYLANE
BIRMINGHAM MI 48010

SIMON W MAROKO MD
2416 AVONDALE
PONTIAC MI 48053

JOHN J MARRA MD
909 WOODWARD AVE
PONTIAC MICH 48053

GORDON L MARSA MD A
HENRY FORD HOSP
DETROIT MI 48202

PERCY S MARSA MD
785 N LAPEER RD
LAKE ORION MICHIGAN 48035

JOSEPH F MARSHALL MD
2056 FOX GLEN CT
BLOOMFIELD HILLS MI 48013

DONALD W MARTIN MD
PONTIAC STATE HOSP
PONTIAC MI 48053

FRANCIS A MARTIN MD
880 WOODWARD
PONTIAC MICH 48053

ROBT J MASON MD L
618 N WOODWARD AVE
BIRMINGHAM MICH 48011

ROBERT T MAST MD
189 TOWNSEND
BIRMINGHAM MI 48011

G R MATHURA MD
212 RIKER BLDG
PONTIAC MICHIGAN 48058

W E BARRY MAYO MD
2338 N WOODWARD AVE
ROYAL OAK MICHIGAN 48073

RAYMOND L MAYOR MD
35 S JOHNSON
PONTIAC MICHIGAN 48053

FRENCH H MC CAIN MD
628 N WOODWARD AVE
BIRMINGHAM MICH 48011

TALMAGE D MCCALLON MD
1307 S WASHINGTON
ROYAL OAK MI 48067

D H MC CANDLISS MD
35 S JOHNSON
PONTIAC MICH 48053

SUE A MCCUTCHEON MD
1100 W UNIVERSITY DR
ROCHESTER MI 48063

ROBERT J MCDONALD MD
4200 N WOODWARD AVE
ROYAL OAK MICHIGAN 48072

WM J MC ELROY JR MD
3415 W 14 MILE RD #11
ROYAL OAK MI 48073

FRANCIS J MC EVOY MD L
1715 CROOKS RD
ROYAL OAK MICH 48067

RODNEY MCFARLAND MD
880 WOODWARD AVE #104
PONTIAC MI 48053

DANIEL E MCGUNEGLE MD A
PONTIAC GEN HOSPITAL
PONTIAC MI 48053

JAMES M MC HUGH MD
20905 GREENFIELD RD
SOUTHFIELD MICHIGAN 48075

THOS S MC INERNEY MD
2026 LAUROME
ROYAL OAK MICHIGAN 48073

JACK B MC INTYRE MD
625 PURDY
BIRMINGHAM MICHIGAN 48009

ROY J MCKINNEY MD
3535 W 13 MILE RD #306
ROYAL OAK MI 48072

J H MC LAUGHLIN MD
604 NORTH WOODWARD
BIRMINGHAM MICHIGAN 48011

HOWARD H MC NEILL MD L
225 W HICKORY GROVE RD
BLOOMFIELD HILLS MI 48013

EDWARD C MC PHEE MD
909 WOODWARD
PONTIAC MICH 48053

MARK C MCQUIGGAN MD
29653 CLUB HOUSE LANE
FARMINGTON MI 48024

PETER P MEDRANO MD
32310 SCHOOLCRAFT
LIVONIA MI 48154

MIHAEL A MEGLER MD
4548 BRIGHTMORE
BLOOMFIELD HILLS MI 48013

CONSTANTINE P MEHAS MD
1060 TRAILWOOD PATH
BIRMINGHAM MICHIGAN 48010

DONALD A MEIER MD
20905 GREENFIELD RD
SOUTHFIELD MI 48075

RICHARD K MEILS MD
310 W UNIVERSITY DR
ROCHESTER MI 48063

HARRY E MEISNER MD
24777 GREENFIELD RD
SOUTHFIELD MI 48075

A N MENDELSSOHN MD
3535 W 13 MILE RD
ROYAL OAK MI 48072

HENRY P MENDOZA MD A
PONTIAC GENERAL HOSP
PONTIAC MI 48053

MICHAEL S MENGE MD
134 W UNIVERSITY DR
ROCHESTER MI 48063

FRANK A MERCER MD L
3333 NE 34TH ST APT615
FORT LAUDERDALE FL 33308

RICHARD B MERKLE MD
3535 W 13 MILE RD
ROYAL OAK MI 48072

MR M S MERRY ADMIN A
ARDMORE HOSPITAL
814 W NINE MILE RD

FERNDALE MI 48220

ALVIN B MICHAELS MD
18777 W 10 MILE RD
SOUTHFIELD MI 48075

DOROTHY M MIKAT MD
PONTIAC GENERAL HOSP
PONTIAC MI 48053

ANIS A MILAD MD
3535 W 13 MILE RD #602
ROYAL OAK MI 48072

ARTHUR C MILLER MD
31723 WALTHAM CT
BIRMINGHAM MI 48009

HAZEN L MILLER MD L
STAR ROUTE BOX 247A
GRAYLING MI 49738

HUBERT MILLER MD
16210 W 9 MILE RD #109
SOUTHFIELD MICHIGAN 48075

IRVING M MILLER MD
23023 ORCHARD LAKE RD
FARMINGTON MICH 48024

SIDNEY MILLER MD
709 TOTTENHAM RD
BIRMINGHAM MI 48008

JAMES T MIMURA MD
31815 SOUTHFIELD
BIRMINGHAM MICH 48009

CANDIDA C MISRA MD
2933 E BRADFORD
BIRMINGHAM MI 48010

MOUFID MITRI MD
134 W UNIV DR #103
ROCHESTER MI 48063

R MOHAJER-SHOJAEE MD
2959 CROOKS RD
TROY MI 48084

ARTURO L MOJARES MD
31112 PICKWICK LN
BIRMINGHAM MI 48009

E D MOJICA MD
140 ELIZABETH LK RD
PONTIAC MI 48053

PABLO A MOJICA MD
140 ELIZABETH LK RD
PONTIAC MI 48053

JAMES C MOLONEY MD N
13125 SHAKER SQ
CLEVELAND OHIO 44120

AHMOD S MOOLA MD
30744 LINCOLNSHIRE E
BIRMINGHAM MI 48010

JOHN S MORAN MD
20101 JMS COUZENS HWY
DETROIT MI 48235

LEONARD A MORIN MD
29929 VERNON DR
SOUTHFIELD MICHIGAN 48076

FRANK L MORTON MD
27725 GREENFIELD RD
SOUTHFIELD MI 48075

ELMER J MUELLER MD
31815 SOUTHFIELD RD
BIRMINGHAM MICHIGAN 48009

CLINTON J MUMBY MD
26789 WOODWARD AVE
HUNTINGTON WDS MICH 48070

LUIS H MUNOZ MD
4400 ORCHARD LK RD
ORCHARD LAKE MI 48033

BARBARA J MUNSON MD
207 KENILWORTH ST
ROYAL OAK MI 48067

HARRY L MUNSON MD
2335 S COMMERCE RD
WALLED LAKE MI 48088

JAMES R MURPHY MD
433 FOX HILLS DR APT1
BLOOMFIELD HILLS MI 48013

KENNETH W MURRAY MD
31815 SOUTHFIELD RD
BIRMINGHAM MI 48009

GORDON S MUSICK MD
31327 W RUTLAND
BIRMINGHAM MI 48009

EUGENE J NALEPA MD
880 WOODWARD AVE
PONTIAC MICH 48053

MILTON L NATHANSON MD
17000 W 8 MILE RD
SOUTHFIELD MI 48075

JOHN F NAZ MD
2826 ORANGE GROVE
WATERFORD MI 48095

PAUL L NEISWANDER MD
30001 VAN DYKE
WARREN MI 48093

ROGER B NELSON MD
PONTIAC GEN HOSP
PONTIAC MI 48053

JACK H NESSEL MD
880 WOODWARD
PONTIAC MICHIGAN 48053

ROBERT J NETZEL MD
2700 COLONIAL WAY
BLOOMFIELD HILLS MI 48013

BURNS G NEWBY MD
20905 GREENFIELD
SOUTHFIELD MICHIGAN 48075

ARNOLD B NEWCOMB MD
19834 RIVERSIDE DR
BIRMINGHAM MICH 48009

VICENTE T NG TSAI MD A
PONTIAC GENERAL HOSP
PONTIAC MI 48053

SAMUEL J NICHAMIN M D
20905 GREENFIELD RD
SOUTHFIELD MICHIGAN 48075

IVEY D NICKERSON MD
6245 GOLFVIEW DR
BIRMINGHAM MICH 48010

D C NIEDERLUECKE MD
35 S JOHNSON
PONTIAC MICHIGAN 48053

EDWARD A NDL MD
240 DAINES ST
BIRMINGHAM MI 48009

JOS I NOSANCHUK MD
35 S JOHNSON
PONTIAC MICHIGAN 48053

ANTONIO S NUCUM MD
5725 TIPPERARY TRAIL
WATERFORD MI 48095

JAMES W NUNN MD
FAA MED OFFICER BX518
WAKE ISLAND

CHARLES H O DONNELL MD
23338 WOODWARD AVE
FERNDALE MI 48220

YOSHIO OKUMURA MD
900 WOODWARD AVE
PONTIAC MI 48053

WM W OLIPHANT MD
785 N LAPEER RD
LAKE ORION MICHIGAN 48035

BAHA ONDER MD
23023 ORCHARD LAKE RD
FARMINGTON MI 48024

JAMES A O NEILL MD
5790 M 15
CLARKSTON MICHIGAN 48016

DONNA L UPIE MD
959 JAMES K
PONTIAC MI 48053

JOHN K ORMOND MD L
909 WOODWARD AVE
PONTIAC MI 48053

GIRARDIN S O SULLIVAN
26520 WILLOWGREEN WAY
FRANKLIN MICHIGAN 48025

HAROLD A OTT MD
3019 N WOODWARD AVE
ROYAL OAK MI 48072

DONALD C OVERY
880 WOODWARD AVE
PONTIAC MICHIGAN 48053

VIRGINIA T PACIS MD
PONTIAC STATE HOSP
PONTIAC MI 48053

DAVID C PACKARD MD
5770 HIGHLAND RD
PONTIAC MICHIGAN 48054

HAYDEN D PALMER MD L
35 W HURON ST
PONTIAC MI 48058

JALAL PANAH MD
2696 RED FOX TRAIL
TROY MI 48084

S WILLIAM PARIS MD
27970 ORCHARD LAKE RD
FARMINGTON MICHIGAN 48024

D A PATEL MD A
WM BEAUMONT HOSP
ROYAL OAK MI 48072

L RAJ S PATIL MD
23030 MOONEY
FARMINGTON MI 48024

CHAS I PATRICK MD
4721 DIXIE HWY
DRAYTON PLAINS MICH 48020

J C PATTERSON MD
3535 W 13 MILE RD
ROYAL OAK MI 48072

CHAS F PAYTON MD
626 N CROOKS RD
CLAWSON MI 48017

ERWIN G PEAR MD
3027 N WOODWARD AVE
ROYAL OAK MICH 48072

JAMES F PEARCE MD
3535 W 13 MILE RD
ROYAL OAK MICHIGAN 48072

WM H PEIRCE MD
800 S ADAMS RD
BIRMINGHAM MICHIGAN 48011

CHAS J PELLETIER MD
1111 N CAMPBELL
ROYAL OAK MICHIGAN 48067

J S PENSAVECCHIA MD
2680 GARLAND
PONTIAC MICHIGAN 48053

PANAYOTIS PESAROS MD
648 N WOODWARD AVE
BIRMINGHAM MI 48011

EDWARD PETROVICH MD
960 WESTVIEW RD
BLOOMFIELD HILLS MI 48013

JOHN R PFEIFER MD
15990 W NINE MILE RD
SOUTHFIELD MI 48075

A D PITONYAK MD
ST JOSEPH MERCY HOSP
PONTIAC MICHIGAN 48053

KENNETH E PITTS MD
6235 MIDDLEBELT
BIRMINGHAM MI 48010

MERLE O PLAGGE MD
4680 DIXIE HIGHWAY
DRAYTON PLAINS MI 48020

ROBERT POOL MD
800 S ADAMS RD
BIRMINGHAM MICH 48011

KENNETH F PORTER MD
900 WOODWARD AVE
PONTIAC MI 48053

HAROLD D PORTNOY MD
445 W HURON ST
PONTIAC MICHIGAN 48053

WALTER A POZNANSKI MD
1100 N WOODWARD AVE
BIRMINGHAM MICH 48011

BRUCE PRUCTOR MD
3431 BALDWIN RD RR4
PONTIAC MICHIGAN 48055

CONRAD A PROCTUR MD
3535 W 13 MILE RD
ROYAL OAK MI 48072

FRANK W PRUST MD
3535 W 13 MILE RD #602
ROYAL OAK MI 48072

ALBERT E QUARTON JR MD
542 PILGRIM RD
BIRMINGHAM MICH 48009

J PATRICK QUIGLEY MD
31815 SOUTHFLD RD #14
BIRMINGHAM MI 48009

JAMES R QUINN JR MD
2070 W VALLEY RD
BLOOMFIELD HILLS MI 48013

IRAJ RAFANI MD
4045 W 13 MILE RD
ROYAL OAK MI 48072

ABNER I RAGINS MD
909 WOODWARD AVE
PONTIAC MICHIGAN 48053

IGNACIO D RAMIREZ MD
3321 ROCHESTER
ROYAL OAK MI 48073

JOAQUIN J RAMIREZ MD
751 CHESTNUT
BIRMINGHAM MICHIGAN 48008

RENATO G RAMOS MD
3535 W 13 MILE RD #205
ROYAL OAK MI 48072

KENNETH I RANNEY MD
122 E BROWN ST
BIRMINGHAM MI 48011

SANFORD J RAUTBORT MD
5111 LAKE BLUFF RD
WALLED LAKE MI 48088

MARY A RAVIN MD
31237 SLEEPY HOLLOW LN
BIRMINGHAM MI 48010

JAMES A READ MD
610 N WOODWARD
BIRMINGHAM MICHIGAN 48011

WM R RECH MD
2335 S COMMERCE RD
WALLED LAKE MI 48088

ROBERT E REID MD
3535 W 13 MILE RD
ROYAL OAK MI 48072

RICHARD C REILLY MD
909 WOODWARD AVE
PONTIAC MI 48053

N C RENOZIPERIS MD
1100 W UNIVERSITY DR
ROCHESTER MI 48063

ROBERT E RICHARD MD
626 N CROOKS RD
CLAWSON MI 48017

WILSON P RICHARDS MD
3500 W MAPLE RD
BIRMINGHAM MICHIGAN 48010

ROBT P RICHARDSON MD
26711 WOODWARD
HUNTINGTON WOODS MI 48070

HARRY L RIGGS MD
149 FRANKLIN BLVD
PONTIAC MICH 48053

AARON D RIKER MD L
640 RIKER BLDG
PONTIAC MI 48058

WILLIAM R RISK MD
909 WOODWARD AVE #14
PONTIAC MI 48053

GEORGE RITTER MD
28245 SOUTHFIELD
LATHRUP VILLAGE MI 48075

EMILIANO RIVERA JR MD
3495 ROCHESTER RD
TROY MI 48084

BRUCE H ROBINSON MD
15990 W NINE MILE RD
SOUTHFIELD MI 48075

HAROLD RODNER MD
27078 ARDEN PARK CIR
FARMINGTON MI 48024

HAROLD R RUEHM MD L
970 LONE PINE RD
BLOOMFIELD HILLS MI 48013

JOHN H ROMANIK MD
31601 W 13 MILE RD
FARMINGTON MICH 48024

LINO A ROMERO MD
1880 S WOODWARD AVE
BIRMINGHAM MI 48011

ROBERT ROONEY MD
667 KINGSLEY
BLOOMFIELD HILLS MI 48013

GLENN A ROSIN MD
149 S CRNBK CROSS RD
BIRMINGHAM MI 48010

HERBERT W ROSSIN MD
18211 W 12 MILE RD
LATHRUP VILLAGE MI 48076

THEODORE L ROUMELL MD
1100 W UNIVERSITY DR
ROCHESTER MI 48063

LAURIE G ROWLEY MD L
10401 NO CAVE CREEK RD
PHOENIX ARIZONA 85020

DONALD E RUESINK MD
127 FERNDALE
ROCHESTER MICHIGAN 48063

EDSON C RUPP MD
3535 W 13 MILE RD
ROYAL OAK MI 48072

DONALD F RUPPRECHT MD
310 W UNIVERSITY DR
ROCHESTER MI 48063

ALVA D RUSH MD
391 HAMILTON
BIRMINGHAM MICH 48011

DAVID S RUSKIN MD
20905 GREENFIELD RD
SOUTHFIELD MICHIGAN 48075

VINCENT P RUSSELL MD
3535 W 13 MILE RD
ROYAL OAK MI 48072

EDW J RUTKOWSKI MD A
3235 BELLE COURT
ROYAL OAK MI 48072

JULIUS RUTZKY M D
3601 W 13 MILE RD
ROYAL OAK MI 48072

JOS J RUVA MD
4463 DIXIE HWY
DRAYTON PLAINS MICH 48020

MERLE F RYDESKY MD
16001 W 9 MILE RD
SOUTHFIELD MI 48075

ENRIQUE SABBAGH MD
17100 W 12 MILE RD
SOUTHFIELD MI 48076

NISON SABIN MD
23077 GREENFIELD RD
SOUTHFIELD MI 48075

VINCENT J SADOVSKY MD
880 WOODWARD AVE
PONTIAC MICHIGAN 48053

HAROLD A ST JOHN MD L
35 WEST HURON ST
PONTIAC MI 48058

MICHEL I SALIB MD
2928 RAMBLING WAY
BLOOMFIELD HILLS MI 48013

CAROLYN S SALISBURY MD
21580 GREENFIELD
OAK PARK MI 48237

ANNE H SAMBORSKI MD
32600 GRAND RIVER
FARMINGTON MI 48024

NORMAN T SAMET MD
1100 N WOODWARD AVE
BIRMINGHAM MI 48011

GLENN A SANFORD MD
35 S JOHNSON
PONTIAC MICHIGAN 48053

THOS J SANSONE MD
909 WOODWARD AVE
PONTIAC MICHIGAN 48053

RAJKUMAR L SARDA MD A
PONTIAC GEN HOSP
PONTIAC MI 48053

USHA R SARDA MD A
PONTIAC GENERAL HOSP
PONTIAC MI 48053

THEODORE SATERSMOEN MD
6405 TELEGRAPH E-4
BIRMINGHAM MI 48010

NORMAN SCHAKNE MD
26711 WOODWARD AVE
HUNTINGTON WOODS MI 48070

JOS L SCHIRLE JR MD
1116 VOORHEIS RD
PONTIAC MICH 48053

JEROME J SCHNEYER MD
25000 W TEN MILE RD
SOUTHFIELD MICHIGAN 48075

ROBT J SCHOENFELD MD
800 S ADAMS RD
BIRMINGHAM MICH 48011

DANL R SCHOLES MD
3535 W 13 MILE RD
ROYAL OAK MI 48072

LEONARD SCHREIER MD
909 S WOODWARD AVE
PONTIAC MI 48053

HOWARD A SCHUNEMAN MD
23760 WOODWARD AVE
PLEASANT RIDGE MICH 48069

DAVID SCHWARTZ MD A
17363 SHERVILLA PL
SOUTHFIELD MI 48075

OSCAR D SCHWARTZ MD
15901 W 9 MILE RD #620
SOUTHFIELD MI 48075

S A SCHWARTZ MD
4680 DIXIE HWY
DRAYTON PLAINS MI 48020

S SCHWEINSBERG MD
4117 SUNNINGDALE DR
BLOOMFIELD HILLS MI 48013

ARTHUR J SEABORN MD R
885 N WOODWARD AVE
BIRMINGHAM MI 48009

ROBT L SEGULA MD
35 S JOHNSON
PONTIAC MICHIGAN 48053

ROBERT SELMAN MD
500 W HURON ST
PONTIAC MICHIGAN 48053

CHAS R SEMPERE MD
35 S JOHNSON
PONTIAC MICH 48053

ISMAIL B SENDI MD
140 ELIZABETH LAKE RD
PONTIAC MI 48053

GEO R SEWELL MD
411 WEST TEN MILE RD
PLEASANT RIDGE MICH 48069

MAXWELL L SHADLEY MD
94 OTTAWA DR
PONTIAC MICH 48053

JEROLD W SHAGRIN MD
4223 PINECROFT CT
ORCHARD LAKE MI 48033

LOREN C SHEFFIELD MD L
617 S W ELM TREE LN
BOCA RATON FL 33432

WARREN E SHELDEN MD
21721 W 11 MILE RD
SOUTHFIELD MI 48076

F MICHAEL SHERIDAN MD
1307 S WASHINGTON ST
ROYAL OAK MICH 48067

HENRY A SHEVITZ MD A
WM BEAUMONT HOSP
ROYAL OAK MI 48072

EON SHIN MD
1100 W UNIVERSITY DR
ROCHESTER MI 48063

MARVIN D SIEGEL MD
1095 W HURON ST
PONTIAC MICHIGAN 48053

PETER SIEGEL MD
880 WOODWARD AVE
PONTIAC MI 48053

SHELDON N SIEGEL MD
18239 WEST 12 MILE RD
LATHRUP VILLAGE MI 48075

LOREN W SIFFRING MD
427 W UNIVERSITY
ROCHESTER MICHIGAN 48063

JOEL J SILBERG MD
16800 GREENFIELD RD
DETROIT MI 48235

WILLIAM G SILLS MD
1223 S WASHINGTON
ROYAL OAK MI 48067

JOHN SILVANI MD
909 WOODWARD AVE
PONTIAC MICHIGAN 48053

MARVIN D SILVER MD
3535 W 13 MILE RD
ROYAL OAK MI 48072

EDWARD K SIMPSON MD L
2 SUNSET AVENUE
CHATHAM ONT CANADA

JOHN R SIMPSON MD
200 ELM ST
BIRMINGHAM MI 48008

ROBERT B SKLAR MD
3535 W 13 MILE RD #304
ROYAL OAK MI 48072

RICHARD A SMALL MD A
WM BEAUMONT HOSP
ROYAL OAK MI 48072

CARLETON A SMITH MD
880 WOODWARD AVE
PONTIAC MICHIGAN 48053

DONALD S SMITH MD
1010 RIKER BLDG
PONTIAC MICHIGAN 48058

GEO E SMITH MD
3535 W 13 MILE RD
ROYAL OAK MICHIGAN 48072

ALLEN R SOBLE MD
23077 GREENFIELD RD
SOUTHFIELD MI 48075

M Z SOKOLOWSKI MD
3721 MILLSPRING
BLOOMFIELD HILLS MI 48013

WM J SOMERVILLE MD
3535 W 13 MILE RD 308
ROYAL OAK MI 48072

ALLEN SOSIN MD
23023 ORCHARD LAKE RD
FARMINGTON MICHIGAN 48024

MARY A SOULE MD
166 NO GLENHURST
BIRMINGHAM MI 48009

LLOYD H SPENCER MD L
1219 S WASHINGTON AVE
ROYAL OAK MICH 48067

HENRY J SPIRO MD
27046 PIERCE
SOUTHFIELD MI 48075

EUGENE L SPOEHR MD L
22832 WOODWARD AVE
FERNDALE MI 48220

EARLE W SPOHN MD L
324 WASHINGTON SQ PL
ROYAL OAK MI 48067

JOHN C STAGEMAN MD
909 WOODWARD
PONTIAC MICHIGAN 48053

S STANISAVLJEVIC MD
2338 WOODWARD AVE
ROYAL OAK MICHIGAN 48073

REGINALDO STANLEY MD
2828 CHARTER BLVD
TROY MI 48084

WM F STANLEY MD
1148 S WOODWARD
ROYAL OAK MICH 48067

MARVIN L STARMAN MD
21701 W 11 MILE RD #10
SOUTHFIELD MI 48075

ROBERT D STEELE JR MD A
5860 SHAUN RD
ORCHARD LAKE MI 48033

EVERETTE M STEFFES MD
3345 COOLIDGE HIGHWAY
BERKLEY MICH 48072

HANS J STEIN MD A
WM BEAUMONT HOSP
ROYAL OAK MI 48072

W H STEPHENS JR MD
189 TOWNSEND
BIRMINGHAM MI 48011

SHELDON D STERN MD
802 MUTUAL BLDG
DETROIT MI 48226

MILAN STOJANOVIC MD
3535 W 13 MILE RD
ROYAL OAK MI 48072

A KENNETH STOLPMAN MD
640 N WOODWARD
BIRMINGHAM MICH 48011

JON L STOLTE MD A
36 CHARLES LANE
PONTIAC MI 48053

DAVID Q STONE MD
WIXOM ASSEMBLY PLANT
P O BOX 1

WIXOM MI 48096

JOHN M STONE MD
3924 W TWELVE MILE RD
BERKLEY MI 48072

RICHARD E STRAITH MD
17100 W 12 MILE RD
SOUTHFIELD MI 48075

BERNARD J STREMLER MD
1460 CHESTERFIELD
BIRMINGHAM MICHIGAN 48009

JAMES D STROUD MD
15901 W NINE MILE RD
SOUTHFIELD MI 48075

MILTON B STUECHELI MD
1084 WILLOW LANE
BIRMINGHAM MICH 48009

PALMER E SUTTON MD L
1413 ORMSBY DR
SUNNYVALE CA 94087

WM H SWARTZ MD
2335 SO COMMERCE RD
WALLED LAKE MI 48088

WILLIAM C SWATEK MD
900 WOODWARD AVE
PONTIAC MI 48053

NORMAN E SWINGLE MD
1775 E 14 MILE RD
BIRMINGHAM MICH 48008

BELA J SZAPPANYOS MD
3325 BURNING BUSH RD
BIRMINGHAM MI 48010

ELAINE HARTJE TAN MD
1800 CAMPUS COURT
ROCHESTER MI 48063

KING L TAN MD
134 W UNIV DR #301
ROCHESTER MI 48063

THIAN LAI TAN MD
805 SPARTAN
ROCHESTER MI 48063

ANTOINETTE TANAY MD
114 S LAFAYETTE
ROYAL OAK MI 48067

DICK A TARPINIAN MD
3535 W 13 MILE RD
ROYAL OAK MICHIGAN 48072

ABRAHAM TAUBER MD
500 W HURON ST
PONTIAC MICHIGAN 48053

JOHN Y TESHIMA M D
3535 W 13 MILE RD
ROYAL OAK MI 48072

D EUGENE THOMPSON MD
1052 WADDINGTON
BIRMINGHAM MI 48009

ALLAN K THORBURN MD
231 S WOODWARD
BIRMINGHAM MI 48011

ROBERT R THRELKELD MD
3535 W 13 MILE RD
ROYAL OAK MI 48072

GERALD C TIMMIS MD
3535 W 13 MILE RD
ROYAL OAK MI 48072

F T TOLEDO MD A
ST JOSEPH MERCY HOSP
PONTIAC MI 48053

THOS S TORGERSON MD
751 CHESTNUT
BIRMINGHAM MICH 48008

ALFRED TOUMA MD
26789 WOODWARD AVE
HUNTINGTON WDS MICH 48070

KENNETH N TRADER MD
15901 W 9 MILE RD #720
SOUTHFIELD MI 48075

WM K TREGENZA MD
20905 GREENFIELD
SOUTHFIELD MICHIGAN 48075

RAYMOND L TREMBLAY MD
2370 WALTON BLVD
ROCHESTER MI 48063

DONALD J TRUMPOUR MD
461 W HURON ST
PONTIAC GEN HOSP

PONTIAC MI 48053

GEORGE TSIATALAS MD
4045 W 13 MILE RD
ROYAL OAK MICHIGAN 48072

CONSTANCE J TUBBS MD
15901 W 9 MILE RD
SOUTHFIELD MI 48075

ROBERT L TUPPER MD
86 OTTAWA DR
PONTIAC MICHIGAN 48053

ATTILA O ULGENALP MD
909 WOODWARD AVE
PONTIAC MI 48053

A S ULLMANN MD
1101 W UNIVERSITY DR
ROCHESTER MI 48063

ROBERT A ULVELING MD
500 W HURON ST
PONTIAC MICHIGAN 48053

ROBERT S UNDERHILL MD
26789 WOODWARD AVE
HUNTINGTON WOODS MI 48070

K L URWILLER MD
909 WOODWARD AVE
PONTIAC MICHIGAN 48053

JOHN H VAN DE LEUV MD
91 S WASHINGTON ST
OXFORD MICHIGAN 48051

KENNETH VANDEN BERG MD
35 S JOHNSON
PONTIAC MICH 48053

SEYMOUR A VANDER M D
20905 GREENFIELD RD
SOUTHFIELD MI 48075

JAY J VAN ZOEREN MD
937 ROCK SPRING RD
BLOOMFIELD HILLS MI 48013

THOS G VARBEDIAN MD
195 W BROWN ST
BIRMINGHAM MICHIGAN 48011

RICHARD K VAUGHT MD
2009 CROOKS RD
ROYAL OAK MICH 48073

JIMMIE J VERLEE MD
PONTIAC GENERAL HOSP
PONTIAC MI 48053

M A VICTORIA MD
PONTIAC STATE HOSP
PONTIAC MICH 48053

SATISH K VIJ MD A
WM BEAUMONT HOSP
ROYAL OAK MI 48072

RADY I VILLAFLOR MD
4851 BURNLEY DR
BLOOMFIELD HILLS MI 48013

WM F VON VALTIER MD
134 W UNIV DR RM 102
ROCHESTER MI 48063

NIELS R WAEHNELDT MD
4755 DOVER CT
BLOOMFIELD HILLS MI 48013

DOUGLAS L WAKE MD
1406 WOODSBORO
ROYAL OAK MICHIGAN 48067

RICHARD H WALKER MD
3601 W 13 MILE RD
ROYAL OAK MI 48072

DONALD B WALLACE MD
1579 W BIG BEAVER RD
TROY MI 48084

ERWIN N WALLACK MD
15660 W TEN MILE RD
SOUTHFIELD MICHIGAN 48075

HOWARD C WALSER MD R
1300 NORTHLAWN
BIRMINGHAM MI 48009

WILLIAM F WANGNER M D
1401 S WASHINGTON
ROYAL OAK MICH 48067

W PAUL WARD MD
3535 W 13 MILE RD
ROYAL OAK MI 48072

FREDK H O WARNER MD
3400 SASHABAW RD
DRAYTON PLAINS MICH 48020

J E WASHINGTON JR MD A
900 WOODWARD AVE
PONTIAC MI 48053

THOS Y WATSON MD
640 N WOODWARD
BIRMINGHAM MICH 48011

WILLIAM F WEAVER MD
33750 FREEDOM RD
FARMINGTON MI 48024

LYNN F WEBBER MD R
461 COLONIAL CT
GROSSE PTE MI 48236

J COPNER WEBSTER MD
22000 GREENFIELD RD
OAK PARK MI 48237

MARVIN S WECKSTEIN MD
28290 TAVISTOCK TRAIL
SOUTHFIELD MI 48075

GEORGE C WEGRZYN MD
1380 BROOKWOOD
BIRMINGHAM MICHIGAN 48009

JOEL E WEINGARTEN MD
18905 CARMONA
SOUTHFIELD MI 48075

G S WEINTRAUB MD
3535 W 13 MILE RD 305
ROYAL OAK MI 48072

ROSALYN Y WEINTRAUB MD A
6990 HOLIDAY DRIVE
BIRMINGHAM MI 48010

LAWRENCE S WEISMAN MD
28780 JOHN R
MADISON HGTS MI 48071

MORRIS WEISS MD
26339 WOODWARD AVE
HUNTINGTON WOODS MI 48070

DIETER WENDLING MD
31815 SOUTHFIELD RD
BIRMINGHAM MICHIGAN 48009

ROBT R WESSELS MD
302 WABEEK BLDG
BIRMINGHAM MICHIGAN 48011

EDWIN J WESTFALL MD
3535 W 13 MILE RD
ROYAL OAK MICHIGAN 48072

WM J WESTMAAS MD
134 JAIKINS BLDG
1100 N WOODWARD AVE

BIRMINGHAM MI 48011

RICHARD A WETZEL MD
WM BEAUMONT HOSP
ROYAL OAK MI 48072

DANIEL B WHITE MD
134 W UNIV DR #309
ROCHESTER MI 48063

ROBERT H WHITE MD
384 HAMILTON AVE
BIRMINGHAM MICHIGAN 48011

JOHN L WIANT MD
6405 TELEGRAPH RD
BUILDING C
SUITE 2
BIRMINGHAM MI 48010

RALPH D WIGENT MD
PONT MOTOR GLENWOOD AV
PONTIAC MI 48053

WM C WILKINSON MD
880 WOODWARD AVE
PONTIAC MICHIGAN 48053

JOHN P WILLIAMS MD
35 S JOHNSON
PONTIAC MICHIGAN 48053

MAURICE E WILLIS MD
500 W HURON ST
PONTIAC MICHIGAN 48053

V WINKLER-PRINS MD
4256 ORCHARD LK RD
ORCHARD LAKE MI 48033

E M WISNIEWSKI MD
950 E MAPLE
BIRMINGHAM MI 48011

WARREN E WOLFE MD
6290 WING LAKE RD
BIRMINGHAM MI 48010

NACIANCENO V WUO MD
1101 W UNIV DR
ROCHESTER MI 48063

WARREN A WOOD JR MD
3535 W 13 MILE RD
ROYAL OAK MI 48072

CHARLES J WOODS MD A
WM BEAUMONT HOSPITAL
3601 W 13 MILE RD

ROYAL OAK MI 48072

HANNA L WOODWARD MD
3856 NORMANWOOD
ORCHARD LAKE MI 48033

ROBERT D WOODWARD MD
1100 N WOODWARD AVE
BIRMINGHAM MICH 48011

CHARLES E YEE MD
5790 M-15
CLARKSTON MI 48016

VELDORA C YESKO MD
1148 S WOODWARD AVE
ROYAL OAK MI 48067

JOHN R YLVISAKER MD
ST JOSEPH MERCY HOSP
PONTIAC MI 48053

DAVID B YOUEL MD
35 S JOHNSON ST
PONTIAC MI 48053

ARTHUR R YOUNG MD L
35 W HURON ST
PONTIAC MI 48058

FRANK A YOUNG MD
134 W UNIVERSITY DR
ROCHESTER MI 48063

RICARDO A YUZON MD
949 JOSLYN RD
LAKE ORION MI 48035

WALTER J ZIMMERMAN MD
32340 SYLVAN LANE
BIRMINGHAM MICHIGAN 48009

J J ZINTERHOFER MD L
17187 SCHAEFER
DETROIT MI 48235

ALPHONSE J ZUJKO MD
606 RIKER BLDG
PONTIAC MICHIGAN 48058

OCEANA

V D BARKER MD
601 E MAIN ST
HART MICHIGAN 49420

LINFORD J DAVIS M D
601 E MAIN ST
HART MICHIGAN 49420

DEAN A GERIG DO
218 N MICHIGAN AVE
SHELBY MI 49455

WILLIS A HASTY MD
204 N MICHIGAN
SHELBY MICH 49455

C A JOHNSON MD
P O BOX 6
NEW ERA MICHIGAN 49446

WARREN R MULLEN MD

PENTWATER MI 49449

JOHN J VRBANAC MD
601 E MAIN ST
HART MICHIGAN 49420

MERLE G WOOD MD R
178 N MEARS ST
PENTWATER MI 49449

ONTONAGON

DONALD H ARCHIBALD MD
BOX 223
ONTONAGON MICH 49953

KARL E HILL MD
9 HEMLOCK ST
WHITE PINE MI 49971

CARL R LAHTI MD
R 2
ONTONAGON MICH 49953

JOHN PIERPONT MD
141 MAPLE
WHITE PINE MICHIGAN 49971

JAMES P STRONG MD
R 1 BOX 406
ONTONAGON MI 49953

OTTAWA

ROBT ALBERS MD
601 MICHIGAN
HOLLAND MICHIGAN 49423

WM ARENDSHORST MD
144 WEST 26TH ST
HOLLAND MI 49423

WM C BAUM M D
601 MICHIGAN
HOLLAND MI 49423

RAYMOND E BECKERING MD
P O BOX 684
GRAND HAVEN MI 49417

DIRK C BLOEMENDAAL MD L
38 S STATE ST
ZEELAND MI 49464

W B BLOEMENDAL MD A
411 WOODLAWN
GRAND HAVEN MI 49417

VERNON L BOERSMA MD
121 W 24 ST
HOLLAND MICH 49423

ALVIN BONZELAAR MD
144 WEST 26TH
HOLLAND MICHIGAN 49423

WM S BOUTWELL MD
967 SOUTH SHORE DR
HOLLAND MI 49423

PHILLIP BRADFORD MD
115 E 26TH
HOLLAND MI 49423

JERRY E BULTHUIS MD
3165 24TH ST
JAMESTOWN MI 49427

JAMES K CHAMNESS MD
121 W 24 TH STREET
HOLLAND MICHIGAN 49423

NELSON H CLARK MD
17 W 10 ST
HOLLAND MICH 49423

CARL S COOK MD R
121 W 24TH ST
HOLLAND MICH 49423

DONALD A DEPHOUSE MD
30 E NINTH ST
HOLLAND MI 49423

BERNADINE DEVALDIS MD
766 W 24TH ST
HOLLAND MI 49423

HAROLD G DE VRIES MD
30 E 9TH ST
HOLLAND MICH 49423

PETER J DE VRIES MD
321 WASHINGTON
GRAND HAVEN MI 49417

DONALD E DE WITT MD
390 FAIRHILL DR
HOLLAND MICHIGAN 49423

FREDK W DE YOUNG MD
109 S JACKSON ST
SPRING LAKE MI 49456

ARNOLD R DOOD MD
598 CENTRAL AVE
HOLLAND MICHIGAN 49423

PAUL DYKEMA MD
788 COLUMBIA AVE
HOLLAND MI 49423

JEROME H DYKSTRA MD
680 S WASHINGTON
HOLLAND MICHIGAN 49423

DONALD H ENDEAN MD
121 WEST 24TH ST
HOLLAND MICHIGAN 49423

MELVIN J FRIESWYK MD
241 E MAIN ST
ZEELAND MICH 49464

ROBERT N GAMBLE MD
1310 WISCONSIN AVE
GRAND HAVEN MI 49417

ROGER J GEMMEN MD
342 W 33RD ST
HOLLAND MI 49423

OWEN J GESINK MD
148 W 39TH ST
HOLLAND MICHIGAN 49423

FRANK L GROAT MD
631 FRANKLIN ST
GRAND HAVEN MICHIGAN 49417

RALPH HAGER MD
3593 VAN BUREN ST
HUDSONVILLE MI 49426

MARINUS H HAMELINK MD
700 W 26TH ST
HOLLAND MICH 49423

HERMAN P HARMS MD
17 W 10TH ST
HOLLAND MICH 49423

DENNIS W HARVEY MD
575 ROBBINS RD
GRAND HAVEN MI 49417

WM HEARD MD R
504 PARK ST
GRAND HAVEN MI 49417

EDW J HELBING JR MD
17 W 10TH STREET
HOLLAND MI 49423

JACK A HENDERSON MD
1310 WISCONSIN AVE
GRAND HAVEN MICHIGAN 49417

H J HOMMERSON MD A
3559 M40
HAMILTON MICHIGAN 49419

JOS B KEARNEY MD
121 W 24 ST
HOLLAND MI 49423

GERRIT J KEMME MD
R ND 3
ZEELAND MICH 49464

JOHN H KITCHEL MD
414 FRANKLIN ST
GRAND HAVEN MICH 49417

MARY F S KITCHEL MD
P O BOX 521
GRAND HAVEN MI 49417

WM C KOOLS MD L
194 W 11TH ST
HOLLAND MICH 49423

SIEBE W KUIPERS MD
144 W 26TH ST
HOLLAND MICH 49423

DERICK J LENTERS MD
121 WEST 24TH ST
HOLLAND MI 49423

RICHARD A LEPPINK MD
601 MICHIGAN
HOLLAND MICHIGAN 49423

ROBERT C MAHANEY MD
601 MICHIGAN AVE
HOLLAND MI 49423

PETER A MC ARTHUR MD
1310 WISCONSIN
GRAND HAVEN MICHIGAN 49417

BERNARD MEEUWSEN M D
601 MICHIGAN AVE
HOLLAND MI 49423

WM J MOERDYK MD L
120 W 14TH ST
HOLLAND MI 49423

RUSSEL R NYKAMP MD R
111 E MAIN ST
ZEELAND MICH 49464

J JAY POST MD
11219 BROWN AVE
ALLENDALE MI 49401

M GARY ROBERTSON MD
1310 WISCONSIN AVE
GRAND HAVEN MI 49417

WM ROTTSCHAEFER MD
601 MICHIGAN
HOLLAND MICH 49423

LLOYD ROTZ MD
575 ROBBINS RD
GRAND HAVEN MICHIGAN 49417

WILLARD M RYPKEMA MD
22 SOUTH 2ND STREET
GRAND HAVEN MICH 49417

R H SCHAFTENAAR MD
5 E 8TH ST #405
HOLLAND MI 49423

DONALD E SIKKEMA MD
1310 WISCONSIN
GRAND HAVEN MI 49417

JAMES M SIMPSON MD
1310 WISCONSIN AVE
GRAND HAVEN MI 49417

GEORGE J SMIT MD
601 MICHIGAN AVE
HOLLAND MI 49423

THOMAS A SMITH MD
1310 WISCONSIN ST
GRAND HAVEN MI 49417

ROBT H STOBBELAAR MD
1310 WISCONSIN
GRAND HAVEN MICH 49417

RALPH TEN HAVE MD L
1030 ORCHARD
GRAND HAVEN MI 49417

HENRY W TEN PAS MD
110 W 22ND ST
HOLLAND MICH 49423

EUGENE C TIMMERMAN MD
126 EASTMANVILLE
COOPERSVILLE MI 49404

THOMAS W TOWNSEND MD
1310 WISCONSIN AVE
GRAND HAVEN MI 49417

OTTO VAN DER VELDE MD L
33 W 8TH ST
HOLLAND MI 49423

ALFRED J VANDE WAA MD
152 E CHERRY ST
ZEELAND MI 49464

CARL E VAN KRIMPEN MD
601 MICHIGAN AVE
HOLLAND MICHIGAN 49423

BERNARD M VEENSTRA MD
1310 WISCONSIN AVE
GRAND HAVEN MICH 49417

JOHN W VER DUIN MD A
1618 GLADYS AVE
GRAND HAVEN MI 49417

PETER J VERKAIK MD
3425 KELLY
HUDSONVILLE MICH 49426

CHARLES WANG MD
14 EAST 25TH STREET
HOLLAND MICHIGAN 49423

JEROME H WASSINK MD
34 E 33RD
HOLLAND MICHIGAN 49423

R L WEELDREYER MD
121 WEST 24TH ST
HOLLAND MI 49423

FLOYD WESTENDORP MD
549 W 18TH ST
HOLLAND MI 49423

WARREN K WESTRATE MD
17 W 10TH ST
HOLLAND MICH 49423

WM WESTRATE JR MD
17 W 10TH ST
HOLLAND MICH 49423

JOHN K WINTER MD
726 STATE ST
HOLLAND MICH 49423

WM G WINTER JR MD
655 COLLEGE AVE
HOLLAND MICH 49423

JOHN H YFF MD
430 W LAWRENCE
ZEELAND MICHIGAN 49464

FREDK F YONKMAN MD R
80 CONVERSE RD
MARION MASS 02738

ATAOLLAH ZAHED MD
39 E MAIN ST
ZEELAND MI 49464

BENJAMIN ZANDSTRA DO O
3337 VAN BUREN ST
HUDSONVILLE MI 49426

SAGINAW

GERALD L ACKERMAN MD R
4700 PINE HAVEN DR
SAGINAW MICH 48603

MILLARD J ALBERS MD
1227 N MICHIGAN AVE
SAGINAW MICH 48602

WM K ANDERSON MD L
BOX 827 BLIND RIVER
ONTARIO CANADA

ROBT G APP MD
3422 DAVENPORT
SAGINAW MICHIGAN 48602

JOSEPH N AQUILINA MD
3406 DAVENPORT
SAGINAW MI 48602

GEORGE C ARNAS MD
1600 N MICHIGAN AVE
SAGINAW MI 48602

WALTER C AVERILL MD
2110 MORSON
SAGINAW MICHIGAN 48602

EDGAR P BALCUEUA MD
3614 DAVENPORT
SAGINAW MI 48602

JACK L BARRY MD
5670 DIXIE HWY
SAGINAW MI 48601

LEROY C BARRY MD
705 ADAMS ST
SAGINAW MI 48602

VERNON V BASS MD
3322 DAVENPORT
SAGINAW MICH 48602

C PETER BEHME MD
5160 HELGA DR
SAGINAW MICHIGAN 48603

MICHAEL T BERGEON MD
2115 BAY ST
SAGINAW MI 48602

MARC G BERTRAND MD
27 W HANNUM BLVD
SAGINAW MICHIGAN 48602

HARRY M BISHOP MD R
4810 CENTENNIAL DR
SAGINAW MI 48603

LELAND M BITNER MD
1705 COURT
SAGINAW MI 48602

WILLIAM A BOW MD
4987 STATE STREET
SAGINAW MICHIGAN 48603

EDWARD BRADLEY MD
4981 SHATTUCK RD
SAGINAW MI 48603

FRIEDRICH P BRENDER MD

FRANKENMUTH MI 48734

GORDON BRIGGS MD
350 W WASHINGTON
HEMLOCK MICHIGAN 48626

LAURENCE BRUGGERS MD
1703 N MICHIGAN AVE
SAGINAW MICH 48602

BERT M BULLINGTON MD
2000 COURT ST
SAGINAW MICH 48602

QUINTER M BURNETT MD
4385 CONCORD
SAGINAW MICH 48603

FRANK J BUSCH MD
1731 N MICHIGAN ST
SAGINAW MICH 48602

MILTON G BUTLER MD R
1600 N MICHIGAN AVE
SAGINAW MICH 48602

DONATO CABRERA JR MD
1600 N MICHIGAN #404
SAGINAW MI 48602

DONALD J CADY MD
2002 COURT ST
SAGINAW MICH 48602

FREDK J CADY JR MD
402 S JEFFERSON AVE
SAGINAW MICH 48607

V W CAMBRIDGE MD
POTTER AT JEFFERSON
SAGINAW MICH 48607

ALLAN K CAMERON MD
1314 S JEFFERSON AVE
SAGINAW MICH 48601

LLOYD A CAMPBELL MD R
335 BROCKWAY PL
SAGINAW MI 48602

FRANCISCO P CARREON MD
1600 N MICH AVE #308
SAGINAW MI 48604

HUGH T CAUMARTIN MD
1537 S WASHINGTON AVE
SAGINAW MICH 48601

PETER R CHISENA MD
6221 DIXIE
BRIDGEPORT MICH 48722

FRANCES S CHOATE MD
1600 N MICHIGAN
SAGINAW MICHIGAN 48602

ROBERT A CLOWATER MD
SAG COMMUNITY HOSP
SAGINAW MI 48605

VITAL E CORTOPASSI MD
324 S WASHINGTON AVE
SAGINAW MICH 48607

CHAS W CORY MD
1227 N MICHIGAN
SAGINAW MI 48602

T A CRESSWELL MD
1236 N MICHIGAN
SAGINAW MICH 48602

GEO CULLEN MD A
2529 N CLINTON ST
SAGINAW MI 48602

CLYDE P DAVENPORT MD
2110 MORSON
SAGINAW MICHIGAN 48602

R S DERIFIELD MD A
25 BRETTON CT
SAGINAW MI 48602

WILLIAM A DEYOUNG MD
CENTRAL LABORATORIES
1100 S WASHINGTON

SAGINAW MI 48601

DONALD C DURMAN MD R
555 ESPLANADE NW #505
VENICE FL 33595

THOMAS A EGGLESTON MD
382 CANTERBURY LN
SAGINAW MI 48603

GEORGE A ELLIS MD
16 E HANNUM BLVD
SAGINAW MI 48602

CECIL W ELY MD L
1820 JANES AVE
SAGINAW MICH 48601

JERRY J EVANS MD
3160 CHRISTY WAY
SAGINAW MI 48603

ALBERT W FARLEY MD
1013 N MICHIGAN
SAGINAW MI 48602

ROBERT D FEEHELEY MD
3521 STATE
SAGINAW MI 48602

E MALCOLM FIELD MD
1600 N MICHIGAN
SAGINAW MICHIGAN 48602

JOHN E FINGER MD
29 BRIAN SCOTT PLACE
SAGINAW MICHIGAN 48602

THOS E FLESCHNER MD R
951 79TH AVE #320
ST PETERSBURG FL 33702

FREDERICK W FOLTZ MD
1703 N MICHIGAN
SAGINAW MI 48602

KENNETH J FORSTER MD
27 BENTON RD
SAGINAW MICHIGAN 48602

JOE H GARDNER MD
815 N MICHIGAN AVE
SAGINAW MICH 48602

ROY J GERARD MD
2419 MACKINAW
SAGINAW MICHIGAN 48602

ROBT D GILMORE MD
234 W SAGINAW
MERRILL MICH 48637

RICHARD D GOLDNER M D
1024 N MICHIGAN
SAGINAW MICH 48602

LOUIS D GOMON MD
1203 N MICHIGAN AVE
SAGINAW MICH 48602

J ORTON GOODSELL DDS A
1305 S OCEAN BLVD
POMPANO BEACH FL 33062

JOHN O GOODSELL MD
1600 N MICHIGAN
SAGINAW MICHIGAN 48602

JACK E GOODWIN MD
1600 N MICH AVE #301
SAGINAW MICH 48602

MICHAEL GRANT MD
101 MARCY
ST CHARLES MI 48655

BETTY LOU GRUNDY MD
8771 WHITE BEECH DR
SAGINAW MI 48603

GEORGE J GUGINO MD
1941 GATE ST
REESE MI 48757

REBII M HANKAN MD
3340 HOSPITAL RD
SAGINAW MI 48603

RICHARD C HAUSLER MD
206 S WEBSTER
SAGINAW MI 48602

ROBT M HEAVENRICH MD
1107 GRATIOT AVE
SAGINAW MICH 48602

DUANE B HEILBRONN MD
1703 N MICHIGAN
SAGINAW MICHIGAN 48602

E C HEINMILLER MD
SAGINAW GEN HOSPITAL
SAGINAW MI 48605

HERBERT O HELMKAMP MD
333 S JEFFERSON
SAGINAW MI 48607

VALERIANO D HEREZA MD
2125 BAY STREET
SAGINAW MICHIGAN 48602

MARY HERLIHY MD
101 MARCY
ST CHARLES MI 48655

RICHARD P HEUSCHELE MD
1909 COOLIDGE ST
SAGINAW MI 48603

VICTOR HILL JR MD
1703 N MICHIGAN AVE
SAGINAW MICHIGAN 48602

RONALD G HINES MD
ST MARYS HOSPITAL
SAGINAW MI 48605

SEAN J HOBAN MD
1709 N MICHIGAN
SAGINAW MI 48602

H L HUBINGER DDS A
501 2ND NATL BNK BLDG
SAGINAW MICHIGAN 48607

HENRY R HUG MD
1731 N MICHIGAN
SAGINAW MI 48602

WM T HYSLOP MD
1610 GRATIOT AVE
SAGINAW MICH 48602

ROBERT JARDINICO MD
3 CENTER WOODS
SAGINAW MICHIGAN 48603

RUDOLPH M JARVI MD
1107 GRATIOT AVE
SAGINAW MICH 48602

KERMIT T JOHNSTONE MD
1050 FISHER DR
SAGINAW MICH 48601

WM B KERR MD
300 S MICHIGAN ST
SAGINAW MICH 48602

VICTOR W KERSHUL MD
4343 STATE
SAGINAW MI 48603

JAMES T KEYES MD
10222 MAPLE RD
BIRCH RUN MICH 48415

EDWARD F KICKHAM MD
705 ADAMS ST
SAGINAW MICH 48602

KENNETH I KILUK MD
1600 N MICHIGAN
SAGINAW MI 48602

HERBERT G KLEEKAMP MD R
1776 S ROGERS RD R 1
CLARE MI 48617

EARL E KLEINSCHMIDT MD
3625 WEBBER ST
SAGINAW MICH 48601

CHARLES N KOENIG MD
3521 STATE ST
SAGINAW MI 48602

ROBT C KOLESAR MD
1005 GRATIOT
SAGINAW MICH 48602

CHARLES J KOUCKY MD
14 CENTER WOODS
SAGINAW MI 48603

FRANCIS V KOWALS MD R
MED DIR CHEC SER GMC
SAGINAW MI 48603

JOHN A KREMSKI MD
1100 S WASHINGTON
SAGINAW MI 48601

THOS V KRETSCHMER MD
1232 N MICHIGAN AVE
SAGINAW MICHIGAN 48602

H F LABSAN MD
1115 COURT
SAGINAW MI 48602

JULES C LASSIGNAL MD
1587 DELTA DRIVE
SAGINAW MICH 48603

TECK S LIAN MD
6 GHIA COURT
SAGINAW MI 48602

KENNETH C LING MD

HEMLOCK MI 48626

ROBERT L LOFTIN MD
1501 N MICHIGAN
SAGINAW MI 48602

THOS O LOHR MD
1135 N MICHIGAN AVE
SAGINAW MICH 48602

NEIL W LOVE MD
505 W TUSCOLA
FRANKENMUTH MICH 48734

ROBT I LURIE MD
2525 S WASHINGTON AVE
SAGINAW MICH 48601

JOHN E MANNING MD
815 N MICHIGAN AVE
SAGINAW MICH 48602

JOHN W MANNING III MD
705 ADAMS
SAGINAW MICH 48602

FRANCIS L MARKEY MD
1600 N MICHIGAN
SAGINAW MI 48602

DARLENE MARTENSON MD
1600 N MICHIGAN AVE
SAGINAW MI 48602

JACK F MARTIN MD
705 ADAMS ST
SAGINAW MICHIGAN 48602

WM P MARTZOWKA MD R
2330 DELAWARE
SAGINAW MICH 48602

WM G MASON MD
1107 GRATIOT AVE
SAGINAW MICH 48602

K Z MASUD MD
2355 WILLIAMSON
SAGINAW MI 48601

HARRY C MATTHEWS MD
1227 N MICHIGAN AVE
SAGINAW MICH 48602

BEN R MAYNE MD
2111 MARSHALL CT
SAGINAW MI 48602

JAMES E MCCOURT
915 ALMIRA ST
SAGINAW MI 48602

WM G MCEWEN MD
1600 N MICHIGAN AVE
SAGINAW MICHIGAN 48602

HENRY J MEYER MD L
6243 DIXIE HWY
BRIDGEPORT MI 48722

V ROBERT MIKAN MD
3900 HOLLAND RD
SAGINAW MICHIGAN 48601

GLENN F MILLER MD
2224 MERSHON
SAGINAW MICHIGAN 48602

ULRICH MOESER MD
1447 N HARRISON
SAGINAW MI 48602

JAMES C MOONEY MD
1600 N MICHIGAN AVE
SAGINAW MICHIGAN 48602

LEONARD J MORGRETTE MD
3424 DAVENPORT
SAGINAW MI 48602

RICHARD D MUDD MD R
1001 HOYT ST
SAGINAW MI 48607

DONAL T MULHERN MD
2716 S JEFFERSON AVE
SAGINAW MI 48607

ALBERT P MURPHY MD
303 N MICHIGAN AVE
SAGINAW MI 48602

RICHARD T MURPHY DDS A
1718 N MICHIGAN
SAGINAW MI 48602

MORRIS J MURRAY MD
3424 DAVENPORT
SAGINAW MICHIGAN 48602

OSCAR A NELSON MD
3324 DAVENPORT
SAGINAW MICHIGAN 48602

PAUL R NOBLE MD
1447 N HARRISON
SAGINAW MICHIGAN 48602

ROBERT T NOLTA MD
1805 VET MEMORIAL PKWY
SAGINAW MI 48601

ROBT D NORTHWAY MD
1811 N MICHIGAN
SAGINAW MI 48602

FRANK D NOVY MD L
P O BOX 1814
SAGINAW MI 48605

CARLOS OBREGON MD
17162 STAMWICH BLVD
LIVONIA MI 48152

JAMES E PACKER MD
5230 STATE ST
SAGINAW MICHIGAN 48603

MANUEL M PEREA MD
599 N FROST DR
SAGINAW MI 48603

CLIFFORD D POTVIN MD
202 PROVINCIAL
SAGINAW MI 48602

ROBT F POWERS MD
1600 N MICHIGAN
SAGINAW MICHIGAN 48602

PERRY E PRATHER MD
1227 N MICH AVE
SAGINAW MICH 48602

JOSEPH M PRICE MD
4680 E SANILAC RD
CARSONVILLE MI 48419

J EUGENE RANK MD
1107 GRATIOT AVENUE
SAGINAW MICHIGAN 48602

NICHOLAS REDFIELD MD
1811 N MICHIGAN AVE
SAGINAW MI 48602

JOS J REICHMAN MD
1455 SHEFFIELD
SAGINAW MI 48605

WILLIAM T RICE MD
1827 N MICHIGAN AVE
SAGINAW MICHIGAN 48602

NED W RICHARDS MD
3518 STATE ST
SAGINAW MICH 48602

HARRY J RICHTER MD R
1401 W DELTA DR
SAGINAW MICH 48603

IVAN J ROGGEN MD
1227 N MICHIGAN
SAGINAW MICH 48602

DAVE B RUSKIN MD
1600 N MICHIGAN
SAGINAW MICH 48602

RICHARD S RYAN MD
1581 S WASHINGTON AVE
SAGINAW MI 48601

DONALD V SARGENT MD
1703 N MICHIGAN AVE
SAGINAW MICH 48602

G A SARMIENTO MD
1600 N MICHIGAN AVE
SAGINAW MI 48602

A J N SCHNEIDER MD
502 W TINKHAM
LUDINGTON MI 49431

FRANK R SCHULTZ MD
243 W BROAD ST
CHESANING MI 48616

GERARD SCOTT MD M
5670 DIXIE HWY
SAGINAW MI 48601

MARTIN C SHARP MD
1803 N MICHIGAN AVE
SAGINAW MICH 48602

JOHN L SHEK MD
803 N MICHIGAN
SAGINAW MICHIGAN 48602

SUEL A SHELDON MD L
77 ELMVIEW CT
SAGINAW MICH 48602

JOHN W SHERMAN MD
403 S FAYETTE
SAGINAW MICHIGAN 48602

GERALD A SIEGGREEN MD
1227 N MICHIGAN
SAGINAW MI 48602

C A SKOWRONSKI MD
1401 E GENESEE ST
SAGINAW MI 48607

HOMER G SLADE MD R
1667 S WASHINGTON AVE
SAGINAW MI 48601

T A SMITH MD
1600 N MICHIGAN AVE
SAGINAW MI 48602

DONALD E SPENGLER DDS A
4291 STATE ST
SAGINAW MI 48603

AARON C STANDER MD
1411 COURT ST
SAGINAW MICH 48602

HUGH L SULFRIDGE JR MD
1011 N MICHIGAN AVE
SAGINAW MI 48602

JOSEPH E TALBOT MD
1311 N MICHIGAN AVE
SAGINAW MI 48602

ROBERT E TAYLOR MD
1447 N HARRISON
SAGINAW MICHIGAN 48602

ARTHUR B THOMPSON MD
2144 OTTAWA ST
SAGINAW MICH 48602

DENNIS M TIBBLE MD
1203 N MICHIGAN
SAGINAW MI 48602

GUNTHER E TIEDKE MD
120 N MICHIGAN AVE
SAGINAW MICH 48602

ROBERT J TOTEFF MD
2110 MORSON
SAGINAW MICHIGAN 48602

MELVIN E TRAMITZ MD
711 SOMERSET RD
SAGINAW MICHIGAN 48603

DONALD TUCKEY MD
1227 N MICHIGAN AVE
SAGINAW MI 48602

TERENCE K TUTTLE MD
1109 COURT ST
SAGINAW MICHIGAN 48602

WM G UNDERHILL MD
8 FIVE OAKS
SAGINAW MICHIGAN 48603

ALFONSO A VILLEGAS MD
1232 N MICHIGAN AVE
SAGINAW MI 48602

JOHN H VINCENT MD
4158 ATWOOD LN
BRIDGEPORT MI 48722

ROBERT L VITU M D
703 W GENESEE
SAGINAW MICHIGAN 48602

VLADIMIR K VOLK MD L
1238 AVALON
SAGINAW MI 48603

BARRY F WAITE MD
4291 STATE RD
SAGINAW MI 48603

PETER R WALSH MD
331 S JEFFERSON
SAGINAW MI 48607

PETER D WAYS MD
4444 STATE APT C307
SAGINAW MI 48603

LESTER E WEBB MD
2419 MACKINAW
SAGINAW MI 48602

ARND W WEISS MD
3521 STATE ST
SAGINAW MICH 48602

NORMAN WESTLUND MD
3253 CONGRESS
SAGINAW MICHIGAN 48602

EDWIN M WRIGHT MD
1311 N MICHIGAN
SAGINAW MICH 48602

MAURICE C WYNES MD
SAGINAW COUNTY HOSP
SAGINAW MI 48605

JOHN YOUNG MD
705 COOPER ST
SAGINAW MICHIGAN 48602

ST. CLAIR

ROBT S BAILEY MD
2425 MILITARY ST
PORT HURON MICHIGAN 48060

RONALDO S BALBOA MD
1216 SIXTH ST
PORT HURON MI 48060

KENNETH C BANTING MD
403 PEOPLES BK BLDG
PORT HURON MICH 48060

J A BARSS MD
1225 10TH ST
PORT HURON MICH 48060

JOHN C S BATTLEY MD L
2038 MILITARY ST
PORT HURON MI 48060

JOS F BEER MD
104 N RIVERSIDE AVE
SAINT CLAIR MICH 48079

WM G BENNETT MD
210 S MAIN ST
YALE MICH 48097

RICHARD M BERG MD
2425 MILITARY ST
PORT HURON MI 48060

ERWIN W BLATTER MD L
3864 GRATIOT AVE
PORT HURON MICH 48060

CHAS L BORDEN MD L
4520 LAKESHORE RD
PORT HURON MICHIGAN 48060

THOS H BOTTOMLEY JR MD
1102 SIXTH ST
PORT HURON MICH 48060

WALTER H BOUGHNER MD
325 PLEASANT ST
ALGONAC MICH 48001

WM S BOWDEN MD
130 WASHINGTON
MARINE CITY MICH 48039

EZRA V BRIDGE MD
416 EDISON BLVD
PORT HURON MICH 48060

COLMAN J BURKE MD
311 PINE ST
PORT HURON MICHIGAN 48060

CLARENCE L CANDLER MD L
1611 HAWTHORNE RD
GROSSE PTE WOODS MI 48236

JOHN O CANTWELL JR MD
2425 MILITARY
PORT HURON MICHIGAN 48060

MAHMOUD CHAFTY MD
2425 MILITARY
PORT HURON MICH 48060

WM O CLELAND JR MD
1209 10TH ST
PORT HURON MICH 48060

ROBT P CLIFFORD MD
506 S RIVERSIDE DR
ST CLAIR MICH 48079

BENJ C CLYNE MD
103 N MAIN ST
YALE MICH 48097

JAMES W COPPING JR MD
1225 TENTH ST
PORT HURON MI 48060

JOHN J COURY JR MD
1225 10TH ST
PORT HURON MICH 48060

WM T DAVISON MD
2425 MILITARY ST
PORT HURON MICH 48060

WM J DINNEN JR MD
2425 MILITARY
PORT HURON MICH 48060

NICHOLAS G DOUVAS MD
4200 GRATIOT
PORT HURON MI 48060

JEAN PAUL DUPUIS MD
1502 SHUMAKER
PORT HURON MICH 48060

EDWIN H FENTON MD R
4620 TRI PAR DR
SARASOTA FL 33580

E W FITZGERALD JR MD
1102 SIXTH ST
PORT HURON MICHIGAN 48060

ARMIN T FRANKE M D
2425 MILITARY
PORT HURON MICH 48060

ERWIN J FUERST MD
1322 N RIVER RD
ST CLAIR MI 48079

JAMES F GERRITS MD
1322 N RIVER RD
ST CLAIR MI 48079

ANTHONY C GHOLZ MD
1209 10TH ST
PORT HURON MICH 48060

JOHN R GILMORE MD
317 MICH BANK BLDG
PORT HURON MICH 48060

H J HAZLEDINE MD
4685 LAKESHORE RD
PORT HURON MICH 48060

DAVID M C HISLOP MD
5076 LAKESHORE RD
PORT HURON MI 48060

ALEXANDER E HLIVKO MD
1605 FRED W MOORE HWY
ST CLAIR MICHIGAN 48079

RUSSELL J HOLCOMB MD
140 S MARKET
MARINE CITY MICH 48039

CHARLES N HOYT MD
1501 KRAFFT RD
PORT HURON MI 48060

THOMAS C JOHNSTON MD
2425 MILITARY ST
PORT HURON MICH 48060

OSCAR B KAHN MD

CAPAC MICH 48014

AUSTIN M KATZ MD
1017 HURON ST
PORT HURON MI 48060

HARRY N KIRBAN MD
5500 LAKESHORE RD
PORT HURON MICHIGAN 48060

DONALD A KOCH MD R
4291 NORTH RD
NORTH ST MI 48049

CLEMENS M KOPP MD
1209 WILLOW ST
PORT HURON MI 48060

HAROLD R KOSTOFF MD
1025 HURON AVE
PORT HURON MICHIGAN 48060

JAMES LAURIDSEN MD
621 RIVER ST
PORT HURON MICH 48060

REUBEN R LICKER MD
2425 MILITARY ST
PORT HURON MICHIGAN 48060

CLAUDE A LUDWIG MD
916 SEVENTH ST
PORT HURON MICH 48060

FREDK E LUDWIG MD
916 7TH ST
PORT HURON MICH 48060

ROBT M LUGG MD
P O BOX 228
PORT HURON MICHIGAN 48060

HARRY E MAYHEW MD
613 N RIVERSIDE DR
ST CLAIR MI 48079

JOHN M MILLER
1025 HURON AVE
PORT HURON MICHIGAN 48060

GLENN E MOHNEY MD
1131 ERIE ST
PORT HURON MI 48060

ALVIN N MORRIS MD
621 RIVER ST
PORT HURON MICH 48060

FRED NERUDA MD
640 N THIRD ST
ST CLAIR MI 48079

WALTER S NOVAK MD R
1501 N RIVER RD #301
ST CLAIR MI 48077

JUAN E OLIVERA MD
2425 MILITARY ST
PORT HURON MI 48060

MICHAEL RAFTERY MD
2425 MILITARY
PORT HURON MICHIGAN 48060

RICHARD C RELKEN MD
2920 PINE GROVE
PORT HURON MI 48060

ROBT E ROWE MD
108 MCMORRAN BLVD
PORT HURON MICHIGAN 48060

JOHN J RUTLEDGE MD
521 PEOPLES BANK BLDG
PORT HURON MI 48060

MICHAEL I SABBAGH MD
1322 N RIVER RD
ST CLAIR MI 48079

JOS L SANDERSON MD
515 PINE ST
PORT HURON MICH 48060

WALOD A SCHAEFER MD
302 MICH BANK BLDG
PORT HURON MICH 48060

JOHN A SERNIAK MD
104 S MAIN ST
YALE MICH 48097

JAMES W SHARPE MD
1209 10TH ST
PORT HURON MI 48060

ELMORE O SHOUDY MD
902 TENTH AVE
PORT HURON MICHIGAN 48060

JAMES J SNIDER MD
2425 MILITARY
PORT HURON MICH 48060

JAMES H TISDEL MD
1209 10TH ST
PORT HURON MI 48060

GLENN F TOMSU MD
1209 10TH ST
PORT HURON MICH 48060

CHAS O TOWNLEY MD
1209 TENTH ST
PORT HURON MICH 48060

ARTHUR H ULMER JR MD
1209 TENTH ST
PORT HURON MICH 48060

SIDNEY C WALKER MD
1209 TENTH ST
PORT HURON MICH 48060

J RALEIGH WARE MD R
3107 24TH ST
PORT HURON MI 48060

GORDON H WEBB MD
875 MICHIGAN AVE
MARYSVILLE MI 48040

W C WECKESSER MD
1602 MILITARY
PORT HURON MICHIGAN 48060

DANIEL J WILHELM MD
P O BOX 228
PORT HURON MI 48060

JAMES G WOLTER MD
1017 HURON AVE
PORT HURON MI 48060

KENNETH W YOST MD
1305 GRATIOT AVE
MARYSVILLE MICH 48040

JOHN A YOUNGS MD
718 GRISWOLD ST
PORT HURON MICHIGAN 48060

ARTHUR B YULL MD
1225 10TH ST
PORT HURON MICHIGAN 48060

ST. JOSEPH

CHARLES R BABER MD
204 E WEST ST
STURGIS MI 49091

LAWRENCE A BERG MD
106 E CHICAGO RD
STURGIS MICH 49091

D E BRADLEY MD
234 S MAIN ST
COLON MICHIGAN 49040

WILBUR G BRAHAM MD
111 S MONROE
STURGIS MICH 49091

PAUL L BROTHERS M D
1313 ROLLING RIDGE LN
STURGIS MI 49091

ROBT H EVANS MD
111 S MONROE ST
STURGIS MICH 49091

S ALBERT FIEGEL MD
111 S MONROE
STURGIS MICH 49091

ROSCOE J FORTNER MD
137 PORTAGE AVE
THREE RIVERS MICH 49093

JASON K HARTJEN MD
206 E WEST ST
STURGIS MI 49091

JOHN M JACOBOWITZ MD
LINCOLN AT MILLARD
THREE RIVERS MICH 49093

OLIN L LEPARD MD
KNOLLWOOD DR R#5
STURGIS MICH 49091

ROBERT LEWIS MD
104 S LAKEVIEW ST
STURGIS MI 49091

DOUGLAS A MACK MD
COUNTY HLTH DEPT
CENTREVILLE MI 49032

HUGH MCCULLOGH MD
111 S MONROE ST
STURGIS MI 49091

CHARLES W D OELL MD
117 SPRING ST
THREE RIVERS MICH 49093

HARRY C PENNINGTON MD
118 S KALAMAZOO
WHITE PIGEON MICH 49099

STANLEY C PENZOTTI MD
117 SPRING ST
THREE RIVERS MICH 49093

CLARK G PORTER MD
226 EAST ST
THREE RIVERS MICH 49093

DONALD R SCHIMNOSKI MD
THREE RIVERS MED CLNC
THREE RIVERS MICH 49093

GEO D SHAW MD
117 SPRING ST
THREE RIVERS MICH 49093

JOHN P SHELDON MD
206 E WEST ST
STURGIS MICH 49091

ROBT D SMITH MD
COLON MI 49040

HEINZ R WEISHEIT MD
ROUTE 1
STURGIS MI 49091

CHAS R ZIMONT MD
160 E WATER
CONSTANTINE MICH 49042

RAYMOND D ZIMONT MD
160 E WATER ST
CONSTANTINE MI 49042

SANILAC

JAMES R CRIPPS MD
MARLETTE MICH 48453

DOROTHY DUVALL MD A
817 PATTERSON AVE
BAY CITY MI 48706

LARRY G ELLIS MD
426 W SPEAKER
SANDUSKY MI 48471

WELDON A GIFT MD L
MARLETTE MI 48453

GERALD L GROAT MD
47 AUSTIN ST
SANDUSKY MI 48471

ROBT K HART MD L
CROSWELL MI 48422

MICHAEL H JAYSON MD
2764 LORRAINE ST
MARLETTE MICHIGAN 48453

JOHN W MC CREA MD
MARLETTE MI 48453

KEATE T MC GUNEGLE MD
SANDUSKY MI 48471

NEIL MUIR MD
CROSWELL MI 48422

M COLE SEAGER MD L
4325 W MAIN ST
BROWN CITY MI 48416

DUANE E SMITH MD
BROWN CITY MI 48416

G EVANS TWEEDIE MD L
SANDUSKY MI 48471

S MARTIN TWEEDIE MD L
SANDUSKY MI 48471

J C WEBSTER MD L
MARLETTE MI 48453

RAYMOND J WINFIELD MD
3014 MAIN ST
MARLETTE MICH 48453

SHIAWASSEE

ALFRED L ARNOLD JR MD L
R 1
OVID MI 48866

EUGENE S AUSTIN MD
1260 ADA ST
OWOSSO MICH 48867

GEORGE M AWAIS MD
113 E WILLIAMS ST
OWOSSO MI 48867

NORMAN F BACH MD
113 E WILLIAMS
OWOSSO MICH 48867

CHAS E BLACK MD
529 W GRAND RIVER
WILLIAMSTON MI 48895

RICHARD C BROWN MD
113 E WILLIAMS ST
OWOSSO MICHIGAN 48867

WALTER D BUZZARD MD
CHESANING MI 48616

ELWOOD M CHIPMAN MD R
COLDWATER MI 49036

ROBERT CLIFFORD MD
MATTHEWS BLDG
OWOSSO MICHIGAN 48867

ALFRED W FOERSTER MD
113 E WILLIAMS ST
OWOSSO MICHIGAN 48867

WM J A FORD JR MD
113 E WILLIAMS ST
OWOSSO MICHIGAN 48867

HENRY T FORSYTH MD
137 S SAGINAW ST
CHESANING MI 48616

JAMES H GRAVES MD R
150 S NORTON
CORUNNA MI 48817

ELIZABETH A L GURDEN
113 E WILLIAMS ST
OWOSSO MICH 48867

JOHN B HANNAH MD
MATTHEWS BLDG
OWOSSO MI 48867

JOHN E HARROUN MD
323 N BALL ST
OWOSSO MI 48867

R V HARROUN MD
323 N BALL ST
OWOSSO MICHIGAN 48867

JOHN HOFSTRA MD
OWOSSO MICHIGAN 48867

VERNE L HOSHAL MD
104 W CLINTON
DURAND MICH 48429

SUN HYDO KIM MD
203 N CEDAR ST
OWOSSO MI 48867

JOHN F MAC GREGOR MD
113 E WILLIAMS ST
OWOSSO MICH 48867

J S MCGEEHAN MD
MATTHEWS BLDG
OWOSSO MICHIGAN 48867

EDWIN R MC KNIGHT MD
320 N WASHINGTON ST
OWOSSO MICH 48867

PHILLIP J MOORE MD
221 E NORTH ST
OWOSSO MI 48867

JOHN E MOROVITZ MD
113 E WILLIAMS
OWOSSO MI 48867

JAMES H PARK MD
812 BRADLEY ST
OWOSSO MICH 48867

ROLLAND PHILLIPS MD
NORTH ST PROF BLDG
OWOSSO MI 48867

CHESTER J RICHARDS MD L
101 E MONROE ST
DURAND MI 48429

ROBERT L ROTY MD
MATTHEWS BLDG
OWOSSO MI 48867

JOS F SAHLMARK MD
812 BRADLEY ST
OWOSSO MICH 48867

PETER SAUER MD
113 E WILLIAMS
OWOSSO MICH 48867

WALTER F SHEPHERD MD R
BOX 148
COLDWATER MI 49036

WM F WEINKAUF MD L
203 N SHIAWASSEE ST
CORUNNA MI 48817

GEO B WICKSTROM MD
529 CLARK AVE
OWOSSO MICH 48867

ROBERT B YUHN MD
826 W KING
OWOSSO MI 48867

TUSCOLA

NORMA ANDERSON MD
206 ELLINGTON
CARO MICHIGAN 48723

JAMES H BALLARD MD
CASS CITY MI 48726

MAURICE H CHAPIN MD
P O BOX 323
MILLINGTON MICHIGAN 48746

VERSA V COLE MD
3340 SAGINAW RD
SAGINAW MI 48605

WILLARD W DICKERSON MD R
1149 N 92ND ST
SCOTTSDALE ARIZ 85256

HAROLD T DONAHUE MD
4674 HILL ST
CASS CITY MICH 48726

E N ELMENDORF II MD
VASSAR MI 48768

MELIH ERHAN MD
CARO STATE HOSPITAL
CARO MI 48723

ROBT R HOWLETT MD R
MCMASTERS BRIDGE RD
STAR RTE 221A
GRAYLING MI 49738

GEZA KOVACS MD
861 GILFORD ROAD
CARO MICHIGAN 48723

ELMER H MERRILL MD L
506 GILFORD RD
CARO MICH 48723

EDWARD J MILES MD
261 GOLFVIEW DR
CARO MI 48723

HERBERT L NIGG MD
CARO MI 48723

EWALD C SWANSON MD L
220 N MAIN
VASSAR MICH 48768

MITCHELL URBAN MD
CARO STATE HOSPITAL
CARO MI 48723

OTTO VON RENNER MD L
BOX 396
REESE MI 48757

VAN BUREN

CARL F BOOTHBY MD
19 S CENTER
HARTFORD MI 49057

FREDK M BOOTHBY MD R
LAWRENCE MI 49064

MAURICE D BUSKIRK MD
215 N KALAMAZOO
PAW PAW MI 49079

JOS E COOPER MD
M-43 WEST
BANGOR MICH 49013

JAMES M DAVIS MD
424 HURON ST
SOUTH HAVEN MICHIGAN 49090

BERT DIEPHUIS MD
511 HURON ST
SOUTH HAVEN MI 49090

H DAVID FENSKE MD
412 PHOENIX ST
SOUTH HAVEN MI 49090

AVISON GANO MD
417 MONROE ST
BANGOR MICH 49013

GEORGE E HUG MD
81 MONROE ST
SOUTH HAVEN MI 49090

JOHN F ITZEN MD L
PO BOX 485
SOUTH HAVEN MICH 49090

JOHN A KLEBER MD
365 BROADWAY
SOUTH HAVEN MICH 49090

JOHN LAWTHER MD
PO BOX 191
HARTFORD MICHIGAN 49057

FRANK J LOOMIS MD
304 OAK
PAW PAW MI 49079

HENRY J LUKASZEK MD
77 N SHORE DRIVE
SOUTH HAVEN MI 49090

ROSCOE I MCFADDEN MD
P O BOX 280
GOBLES MI 49055

DAVID J MILLARD MD
305 E OAK ST
PAW PAW MI 49079

DALE K MORGAN MD
403 PHOENIX ST
SOUTH HAVEN MICHIGAN 49090

NEIL D MULLINS MD
P O BOX 283
BLOOMINGDALE MI 49026

ARTHUR E PARKS MD
148 N MAIN
LAWTON MI 49065

R W SPALDING M D
PO BOX 280
GOBLES MI 49055

ADELBERT L STAGG MD
9 N MAPLE ST
HARTFORD MICH 49057

G LEE STAGG MD
BOX 307
HARTFORD MICHIGAN 49057

RUTH E A STAGG MD
BOX 38
HARTFORD MICH 49057

PAUL W SUNDIN MD

DECATUR MI 49045

CHARLES TEN HOUTEN MD
215 N KALAMAZOO
PAW PAW MI 49079

EDWIN H TERWILLIGER MD R
10428 SPOONBILL RD W
BRADENTON FL 33505

MARTIN J URIST MD R
ROUTE 5
SOUTH HAVEN MI 49090

DAVID B WITTE MD
403 PHOENIX ST
SOUTH HAVEN MI 49090

WM R YOUNG MD L
THIRD ST
LAWTON MI 49065

WASHTENAW

MAURICE S ALBIN MD
180 UNDERDOWN DR
ANN ARBOR MI 48105

DON K ALEXANDER MD
301 N INGALLS ST
ANN ARBOR MI 48104

BARRY H ALFORD MD
385 N MILL
PLYMOUTH MICHIGAN 48170

RICHARD J ALLEN MD
UNIVERSITY HOSPITAL
ANN ARBOR MICHIGAN 48104

LYLE M ALLIS MD
2355 E STADIUM BLVD
ANN ARBOR MI 48104

DAVID G ANDERSON MD
2490 ADARE
ANN ARBOR MICH 48104

GERHARD D ANDERSON MD A
9500 E ORCHARD DR
ENGLEWOOD CO 80110

ROBT E ANDERSON MD
2136 S SEVENTH
ANN ARBOR MI 48103

RUSSELL C ANDERSON MD A
UNIV MEDICAL CTR
ANN ARBOR MI 48104

HENRY O APPELMAN MD
UNIV MEDICAL CENTER
ANN ARBOR MI 48104

ROSITA N AQUINO MD A
ST JOSEPH MERCY HOSP
ANN ARBOR MI 48104

RUSSELL M ATCHISON MD
501 W DUNLAP
NORTHVILLE MICH 48167

ROBERT G AUSE MD
1821 SHERIDAN
ANN ARBOR MICHIGAN 48104

CARL E BADGLEY MD L
1257 ISLAND DR
ANN ARBOR MI 48105

ROBT W BAILEY MD
UNIVERSITY HOSP
ANN ARBOR MICH 48104

DALE E BAKER MD
ST JOSEPH MERCY HOSP
ANN ARBOR MI 48104

EMILY A BANDERA MD
4200 E HURON RIVER DR
ANN ARBOR MICHIGAN 48104

JAROSLAV M BANDERA MD
4200 E HURON RIVER DR
ANN ARBOR MICHIGAN 48104

NORMAN L BANGHART MD
1950 MANCHESTER RD
ANN ARBOR MICH 48104

PAUL S BARKER MD R
BOX 87
BONNOTS MILL MO 65016

R CRAIG BARLOW MD
326 N INGALLS ST
ANN ARBOR MICH 48104

WALTER L BARRON MD
2201 DELAWARE
ANN ARBOR MICHIGAN 48103

WM A BARSS MD
525 W CROSS ST
YPSILANTI MICH 48197

LEE E BARTHOLOMEW MD
1355 FAIRLANE DR
ANN ARBOR MI 48104

GAIL M BARTON MD A
N P I UNIV HOSP
ANN ARBOR MI 48104

THOMAS J BASS MD
201 S HAMILTON
YPSILANTI MICH 48197

PAUL H BASSOW MD L
ST JOSEPH HOSP
ANN ARBOR MI 48104

BARRY F BATES MD
ST JOSEPH MERCY HOSP
ANN ARBOR MI 48104

JOHN G BATSAKIS MD
U OF M - PATH DEPT
ANN ARBOR MI 48104

GERHARD H BAUER MD
2015 MANCHESTER RD
ANN ARBOR MICH 48104

JERE M BAUER MD
1313 E ANN ST
ANN ARBOR MICH 48104

SAML BEHRMAN MD
2866 PROVINCIAL DR
ANN ARBOR MICH 48104

WM H BEIERWALTES MD
U M MEDICAL CENTER
ANN ARBOR MICHIGAN 48104

RICHARD A BEISON MD
1795 W STADIUM
ANN ARBOR MICHIGAN 48103

WALTER BELSER MD
2310 E STADIUM BLVD
ANN ARBOR MICH 48104

LEONARD F BENDER MD
1405 E ANN UNIV HOSP
ANN ARBOR MI 48104

R M BENSON MAJ MC A
4601 PRISCILLA LN
WICHITA FALLS TX 76306

FREDK E BENTLEY MD
851 S MAIN ST
PLYMOUTH MICH 48170

TERRY J BERGSTROM MD A
375 MARAVILLA DR
RIVERSIDE CA 92507

CARL F BERNER MD A
UNIV MEDICAL CTR
ANN ARBOR MI 48104

R C BERNREUTER MD
213 CLARK ST
SALINE MI 48176

JOHN N BICKNELL MD
703 FIRST NATL BLDG
ANN ARBOR MICHIGAN 48106

GERALD E BLANCHARD MD
775 SO MAIN ST
CHELSEA MI 48118

LYNN W BLUNT MD
P O BOX 2060
ANN ARBOR MI 48106

DELBERT E BOBLITT MD
2112 WALLINGFORD
ANN ARBOR MICHIGAN 48104

WILLIAM J BOGARD MD A
BOX A
YPSILANTI MI 48197

ROGER BOLES MD
980 COUNTRY CLUB RD
ANN ARBOR MICHIGAN 48105

JAMES H BOTSFORD MD
775 S MAIN ST
CHELSEA MICHIGAN 48118

JOHN E BOUDEMAN MD
425 E WASHINGTON ST
ANN ARBOR MI 48108

RALPH L BRANDT MD
326 N INGALLS
ANN ARBOR MICHIGAN 48104

BARRY A BREAKEY MD
2216 MEDFORD
ANN ARBOR MICHIGAN 48104

WILSON K BREWER MD R
4255 WASHTENAW
ANN ARBOR MI 48104

EUGENE M BRITT PHD A
1411 BARDSTOWN TR
ANN ARBOR MI 48105

ROBERT H BROUGHER MD
606 W STADIUM BLVD
ANN ARBOR MI 48103

WALTER G BROVINS MD
YPSILANTI STATE HOSP
YPSILANTI MICHIGAN 48197

PHILIP N BROWN MD R
1265 LONG LAKE COURT
BRIGHTON MI 48116

WM E BROWN III MD
2101 BELMONT RD
ANN ARBOR MICH 48104

PAUL J BROWNSON MD
CHELSEA MEDICAL CLINIC
CHELSEA MI 48118

H C BRYANT M D
425 E WASHINGTON
ANN ARBOR MICHIGAN 48108

HARRY D BUCALO JR MD
2207 S SEVENTH
ANN ARBOR MICHIGAN 48103

ROBERT A BUCHANAN MD
3045 FOXCROFT
ANN ARBOR MICHIGAN 48104

ROY E BUCK MD A
1405 E ANN ST
ANN ARBOR MI 48104

JACK L BUSH MD
1950 MANCHESTER RD
ANN ARBOR MICHIGAN 48104

GERALD E BUTLER MD
2311 E STADIUM BLVD
ANN ARBOR MICHIGAN 48104

GEORGE H CAMERON MD
2311 E STADIUM
ANN ARBOR MI 48104

COLIN CAMPBELL MD
2110 WOMENS HOSPITAL
ANN ARBOR MI 48104

DARRELL A CAMPBELL MD
617 STRATFORD
ANN ARBOR MICH 48104

A M CAPILI MD
840 MAUS
YPSILANTI MI 48197

E ESQUEJO CAPILI MD
840 MAUS
YPSILANTI MI 48197

ROBT B CARBECK MD
3080 EXMOOR
ANN ARBOR MICHIGAN 48104

CATHERINE CARROLL MD
1130 HILL ST
ANN ARBOR MICH 48104

DEAN P CARRON MD
425 E WASHINGTON
ANN ARBOR MICHIGAN 48108

SAMUEL H CARTER MD
ST JOSEPH MERCY HOSP
ANN ARBOR MI 48104

JAMES T CASSIDY MD
590 LANSWAY
ANN ARBOR MI 48103

JOSEPH C CERNY MD
3021 PROVINCIAL DR
ANN ARBOR MICHIGAN 48104

DANIEL D CHAPMAN MD
825 PACKARD RD
ANN ARBOR MI 48104

GEORGE J CHATAS MD
2984 HICKORY LANE
ANN ARBOR MICHIGAN 48104

ROBERT H CHESKY MD
2020 HALL AVE
ANN ARBOR MI 48104

CHAS G CHILD 111 MD
UNIVERSITY HOSPITAL
ANN ARBOR MICHIGAN 48104

EUGENE F CLAEYS MD
3775 GREENBRIAR #234A
ANN ARBOR MI 48105

ALLAN G CLAGUE MD
3444 ROBINWOOD DR
ANN ARBOR MI 48103

ENSIGN E CLYDE MD
1181 S MAIN ST
PLYMOUTH MICH 48170

BRUCE E COHAN MD
2355 E STADIUM BLVD
ANN ARBOR MICHIGAN 48104

JEROME W CONN MD
200 ORCHARD HILL DR
ANN ARBOR MI 48104

RALPH R COOK MD A
W-5641 UNIV HOSPITAL
ANN ARBOR MI 48104

MORTON S COX JR MD
3991 PENBURTON LN
ANN ARBOR MI 48105

CLARENCE E CROOK MD
1657 GLENNWOOD RD
ANN ARBOR MICHIGAN 48104

THOMAS N CROSS MD
UNIV MEDICAL CENTER
ANN ARBOR MICHIGAN 48104

EDWARD G CURTIS MD
1825 W STADIUM BLVD
ANN ARBOR MICHIGAN 48103

CHARLES W DAVENPORT MD
CHILDREN S PSYCH HOSP
ANN ARBOR MI 48104

FRED M DAVENPORT MD
1038 MARTIN PL
ANN ARBOR MICH 48104

PAULA G DAVEY MD
425 E WASHINGTON
ANN ARBOR MI 48108

WINTHROP N DAVEY MD
331-F LAKEMOORE DR NE
ATLANTA GA 30342

RICHARD W DEATRICK MD
623 WATERSEDGE
ANN ARBOR MICH 48105

P F ROBERT DECAIRES MD
2730 N RANDOLPH
ARLINGTON VA 22207

RUSSELL N DE JONG MD
1526 HARDING RD
ANN ARBOR MICH 48104

THOMAS J DEKORNFELD MD
2581 HAWTHORN RD
ANN ARBOR MICHIGAN 48104

THOMAS A DELL MD
2900 BRANDYWINE
ANN ARBOR MI 48104

W D DEN HOUTER MD
225 N SHELDON
PLYMOUTH MI 48170

JOHN S DE TAR MD L
55 W MAIN ST
MILAN MI 48160

RICHARD C DEW MD
2355 E STADIUM BLVD
ANN ARBOR MI 48104

RODRIGO DIAZ PEREZ MD
2959 HICKORY LN
ANN ARBOR MICHIGAN 48104

GORDON C DIETERICH MD
4038 JACKSON RD
ANN ARBOR MICH 48106

RICHARD S DILLMAN MD
1450 COVINGTON
ANN ARBOR MI 48103

REED O DINGMAN MD
221 N INGALLS
ANN ARBOR MICHIGAN 48104

BERTRAM D DINMAN MD
OCCUP SAFETY & HLTH
CASE POSTALE 500
CH-1211
GENEVE22 SWITZERLAND

CARA G DOANE MD
1715 WASHTENAW AVE
YPSILANTI MI 48197

EDWARD R DOEZEMA MD
1111 E CATHERINE
ANN ARBOR MI 48104

WILBUR E DOLFIN MD
2210 MELROSE
ANN ARBOR MICHIGAN 48104

EDWARD F DOMINO MD
3071 EXMOOR
ANN ARBOR MICHIGAN 48104

RICHARD P DORR MD
ST JOSEPH MERCY HOSP
ANN ARBOR MI 48104

RUDENZ T DOUTHAT MD
1415 BEECHWOOD
ANN ARBOR MI 48103

JAMES R DRIVER MD
155 UNDERDOWN
ANN ARBOR MI 48105

CLYDE K DRYER MD
3033 SOPHIA ST
WAYNE MICH 48184

MAX L DURFEE MD
207 FLETCHER
ANN ARBOR MI 48104

JOHN E DWYER MD
425 E WASHINGTON
ANN ARBOR MI 48108

WM P EDMUNDS MD
750 TOWNER
YPSILANTI MICH 48197

MELVIN L EDWARDS JR MD
1210 MAPLE RD
ANN ARBOR MI 48103

JOHAN W ELIOT MD
SCH OF PUB HEALTH
ANN ARBOR MI 48104

LYLE D ELLIOTT MD
750 TOWNER ST
YPSILANTI MICH 48197

WARREN E EMLEY MD A
UNIV MEDICAL CTR
ANN ARBOR MI 48104

OTTO K ENGELKE MD L
313 WASHTENAW CO BLDG
ANN ARBOR MICHIGAN 48108

JEROME L EPSTEIN MD
27 SO PROSPECT
YPSILANTI MI 48197

MEHMET E ERDEM MD
PLYMOUTH STATE HOME
NORTHVILLE MI 48167

ELWIN C FALK MD
461 N MANSFIELD
YPSILANTI MICHIGAN 48197

DANIEL J FALL MD
ST JOSEPH MERCY HOSP
ANN ARBOR MI 48104

HAROLD F FALLS MD
UNIVERSITY HOSP
ANN ARBOR MICH 48104

SAEED M FARHAT MD
424 ONAWAY
ANN ARBOR MI 48104

ARMANDO R FAVAZZA MD A
N P I UNIV OF MICH
ANN ARBOR MI 48104

BARBARA S FAVAZZA MD A
N P I UNIV OF MICH
ANN ARBOR MI 48104

JUAN V FAYOS MD
UNIVERSITY MED CENTER
ANN ARBOR MICHIGAN 48104

IRVING FELLER MD
2023 DEVONSHIRE
ANN ARBOR MI 48104

SHELDON L FELLMAN MD
2216 MEDFORD RD
ANN ARBOR MICHIGAN 48104

JAY S FINCH MD
51259 MURRAY HILL DR
PLYMOUTH MI 48170

STUART M FINCH M D
CHILD PSYCHIATRIC HOSP
ANN ARBOR MI 48104

GEO C FINK MD
411 LINDA VISTA
ANN ARBOR MICH 48104

JOHN A FINK MD A
UNIV MEDICAL CENTER
ANN ARBOR MI 48104

JOS V FISHER MD
116 PARK ST
CHELSEA MI 48118

ROBERT J FISHER MD
750 TOWNER
YPSILANTI MI 48197

ARTHUR W FLEMING MD
2126 PAULINE 304
ANN ARBOR MI 48103

WILLIAM J FOLEY MD
1075 BARTON DR #116
ANN ARBOR MI 48105

WINSLOW G FOX M D
715 N UNIVERSITY
ANN ARBOR MICH 48104

F BRUCE FRALICK MD
UNIVERSITY HOSP

D-2137 N OUT PATIENT
ANN ARBOR MI 48104

ROBT L FRANSWAY MD
2785 PARK RIDGE DR
ANN ARBOR MI 48103

ARTHUR B FRENCH MD
280 OAKWAY
ANN ARBOR MI 48105

A JAMES FRENCH MD
356 AUSABLE PLACE
ANN ARBOR MICH 48104

MARGARET S FRENCH MD
VET ADMIN HOSPITAL
ANN ARBOR MI 48105

CHARLES F FREY MD
3555 DALEVIEW DR
ANN ARBOR MI 48103

MOSES M FROHLICH MD L
1313 E ANN ST
ANN ARBOR MICH 48104

LYLE W FROST MD
309 N WASHINGTON ST
YPSILANTI MICH 48197

CARL M FRYE MD
301 N INGALLS
ANN ARBOR MICHIGAN 48104

T O GABRIELSEN MD
UNIVERSITY MED CENTER

DEPT OF RADIOLOGY
ANN ARBOR MI 48103

JOHN C GALL MD
2912 SHEFFIELD CT
ANN ARBOR MI 48105

JAMES E GALLIGAN MD
18471 HAGGERTY RD
NORTHVILLE MI 48167

D E GARRISON MD
205 S DAVENPORT
SALINE MI 48176

CHARLES F GEHRKE MD
ST JOSEPH MERCY HSOP
ANN ARBOR MI 48104

PAUL F GERIGK MD
2410 MOLLN
KRS LAUENBURG
NEUES LAND 9
WEST GERMANY

VLADO A GETTING MD
SCH OF PUB HLTH U OF M
ANN ARBOR MICH 48104

RALPH M GIGNAC MD
32320 MICHIGAN
WAYNE MICH 48184

PAUL W GIKAS MD
1900 MERSHON
ANN ARBOR MI 48103

ROSALIE J GING MD
VETERANS ADM HOSP
ANN ARBOR MI 48105

DONALD W GOIN MD
3210 DELRAY DR
FT WAYNE IND 46805

ROBT I GOLDSMITH MD
216 MICH THEATRE BLDG
ANN ARBOR MI 48106

F E GONZALEZ-VIDELA MD A
3501 WILLIS RD
YPSILANTI MI 48197

LOWELL I GOODMAN MD
2800 PLYMOUTH RD
ANN ARBOR MI 48105

J R G GOSLING MD
315 CORRIE RD
ANN ARBOR MICHIGAN 48105

JOEL D GOTTLIEB MD
3946 PENBERTON
ANN ARBOR MICHIGAN 48105

ALEXANDER GOTZ MD
2201 MEDFORD RD
ANN ARBOR MICH 48104

STUART M GOULD JR MD
MERCYWOOD HOSP BOX 65
ANN ARBOR MICHIGAN 48107

WILLIAM C GRABB MD
221 N INGALLS ST
ANN ARBOR MICHIGAN 48104

WM A GRACIE JR MD
2441 SHANNONDALE
ANN ARBOR MICHIGAN 48104

WM H GRAVES III MD
1825 W STADIUM BLVD
ANN ARBOR MI 48103

JERRY M GRAY MD
ST JOSEPH MERCY HOSP
ANN ARBOR MI 48104

GEORGE W GREENMAN MD
2311 E STADIUM BLVD
ANN ARBOR MI 48104

S PHILLIP GRILLO MD
265 MAIN ST
BELLEVILLE MI 48111

GERARD GROS MD
5300 BOLSOM TERRACE
PLANTATION FL 33314

GLENN R GROUSTRA MD
555 E WILLIAMS
ANN ARBOR MI 48108

NORMA B GUTIERREZ MD
1507 PINE VALLY BLVD
ANN ARBOR MI 48104

DAN W HABEL MD M
WEST 104 5TH ST
SPOKANE WA 99204

GEO W HAGERMAN MD
321 N INGALLS ST
ANN ARBOR MICH 48104

WALTER W HAMMOND JR MD
221 N SHELDON RD
PLYMOUTH MI 48170

HEINRICH H HANDORF MD L
455 PARK PLACE
NORTHVILLE MI 48167

LAMAR J HANKAMP MD
2119 WOODSIDE
ANN ARBOR MICH 48104

MARVIN R HANNUM MD
54 W MAIN
MILAN MICH 48160

FREDERICK N HANSON MD
34178 SPRING VALLEY
WESTLAND MI 48185

E R HARRELL JR MD
UNIV MED CTR RM C
ANN ARBOR MICH 48104

BRADLEY M HARRIS MD L
27 S PROSPECT
YPSILANTI MICH 48197

SCOTT T HARRIS MD
GAYLORD STATE HOME
GAYLORD MI 49735

ROBT T HARTMAN MD
519 W MAIN
MILAN MICH 48160

WM N HAWKS JR MD A
14323 STOFER CT
CHELSEA MI 48118

DAVID K HEAPS MD A
UNIV MEDICAL CTR
ANN ARBOR MI 48104

GERHARDT A HEIN MD
2890 PEBBLE CREEK RD
ANN ARBOR MI 48104

JOHN W HENDERSON MD
UNIVERSITY HOSP
ANN ARBOR MICH 48104

ROBT C HENDRIX MD
1139 VESPER RD
ANN ARBOR MICH 48103

L DELL HENRY MD L
706 W HURON ST
ANN ARBOR MI 48103

F JAMES HERBERTSON MD
ST JOSEPH MERCY HOSP
ANN ARBOR MI 48104

JAMES E HERLOCHER MD
2355 E STADIUM BLVD
ANN ARBOR MI 48104

KARL R HERWIG MD
UNIV MEDICAL CTR
ANN ARBOR MI 48104

WM M HESTON III MD
720 E CATHERINE
ANN ARBOR MI 48104

SAMUEL P HICKS MD
1112 MEADOWBROOK
ANN ARBOR MICHIGAN 48103

H MARK HILDEBRANDT MD
940 MAIDEN LANE
ANN ARBOR MICH 48105

CHARLES A HILL MD
425 E WASHINGTON ST
ANN ARBOR MI 48108

DORIN L HINERMAN MD
1313 E ANN ST
ANN ARBOR MICH 48104

NG HARRY HING MD
1323 FRANKLIN BLVD
ANN ARBOR MI 48103

MIKIO H HIRAGA MD
1795 W STADIUM
ANN ARBOR MICHIGAN 48103

FREDERIC L HOCH MD
7696 KRESGE BLDG
ANN ARBOR MI 48104

FRED J HODGES MD L
5 HIGHLAND LN
ANN ARBOR MI 48104

JOHN F HOLT MD
1313 E ANN ST
ANN ARBOR MICH 48104

FRED HOLTZ MD
326 N INGALLS
ANN ARBOR MICHIGAN 48104

MILTON R HORWITZ MD A
UNIV OF MICHIGAN
ANN ARBOR MI 48104

VERNE L HOSHAL JR MD
ST JOSEPH MERCY HOSP
ANN ARBOR MI 48104

PHILLIP A HOSKINS MD
826 EDGEWOOD PL
ANN ARBOR MI 48103

FREDERIC B HOUSE MD
7965 N TERRITORIAL RD
DEXTER MI 48130

STACY C HOWARD MD R
1936 WHITEHALL DR
WINTER PARK FL 32789

WILLIAM F HOWATT MD
UNIVERSITY HOSPITAL
ANN ARBOR MICH 48104

PHILIP B HUIZENGA MD
BOX A
YPSILANTI MICHIGAN 48197

RALPH M HULETT MD
2881 PROVINCIAL DR
ANN ARBOR MICHIGAN 48104

RALPH F HULL MD A
UNIV MEDICAL CTR
ANN ARBOR MI 48104

DAVID W HUNTER MD A
UNIV MEDICAL CENTER
ANN ARBOR MI 48104

SAML J HYMAN MD
27342 MICHIGAN AVE
INKSTER MICH 48141

ROBT S IDESON II MD
2200 VINEWOOD AVE
ANN ARBOR MICHIGAN 48104

JOSEPH E JACKSON MD A
SCHOOL OF PUBLIC HLTH
UNIV OF MICH
ANN ARBOR MI 48104

JOS S JACOB MD
202 E WASHINGTON ST
ANN ARBOR MICH 48108

FRANK W JEFFRIES MD
425 E WASHINGTON ST
ANN ARBOR MI 48108

JOSEPH G JENDER MD
1302 W MAPLE ST
PLYMOUTH MI 48170

ROBERT E JENSEN MD A
UNIV MEDICAL CTR
ANN ARBOR MI 48104

B JIMENEZ MD R
2325 DEVONSHIRE
ANN ARBOR MI 48104

ROBT O JOHNSON MD
3432 WOODLEA DR
ANN ARBOR MICH 48103

SYDNEY JOSEPH MD
P O BOX 1127
ANN ARBOR MI 48106

FRANCIS P JUDGE MD A
UNIV OF MICHIGAN
NEUROLOGY DEPT
ANN ARBOR MI 48104

RICHARD D JUDGE MD
UNIV MEDICAL CENTER
ANN ARBOR MICHIGAN 48104

ANDREA C JUNGWIRTH MD A
UNIV HOSP PHYS MED
ANN ARBOR MI 48104

THEODORE G KABZA MD
326 N INGALLS
ANN ARBOR MICHIGAN 48104

EDGAR A KAHN MD L
500 BURSON PL
ANN ARBOR MICH 48104

ARNOLD H KAMBLY JR MD
201 S MAIN ST
ANN ARBOR MICH 48108

HERBERT KAUFER MD
UNIV MEDICAL CTR
ANN ARBOR MI 48104

DONALD R KAY MD A
UPJOHN CENTER
ANN ARBOR MI 48104

FRANK V KEARY MD A
1760 WASHTENAW AVE
YPSILANTI MI 48197

PAUL A KELLEY MD
326 N INGALLS
ANN ARBOR MICHIGAN 48104

MAHMOOD KELYADERANY MD A
ST JOSEPH MERCY HOSP
ANN ARBOR MI 48104

DAVID C KEM MD M
TRIPLER GEN HOSP
APO SAN FRANCISCO CA 96438

W R KEMP JR MD
8124 MAIN ST
DEXTER MICH 48130

SUSAN J KENNEDY MD
ST JOSEPH MERCY HOSP
ANN ARBOR MI 48104

A C KERLIKOWSKE MD L
7111 S RIVERSIDE DR
MARINE CITY MI 48039

WHEELER H KERN MD L
2011 MIDDLEBELT RD
GARDEN CITY MICHIGAN 48135

ROBERT L KERRY MD
340 BARTON NORTH DR
ANN ARBOR MICHIGAN 48105

JAMIL KHEDER MD
44526 CLARE BLVD
PLYMOUTH MICHIGAN 48170

CHONGJIN KIM MD
PLY STATE TRAIN HOME
NORTHVILLE MI 48176

WM W KIMBROUGH MD
1230 FAIR OAKS PKWY
ANN ARBOR MICHIGAN 48104

GLENN W KINDT MD
UNIV MEDICAL CTR
ANN ARBOR MI 48104

LOUIS P KIVI MD
5950 W TEXTILE RD
SALINE MI 48176

EDWARD W KLEIN MD
ST JOSEPH MERCY HOSP
ANN ARBOR MI 48104

LEO A KNOLL MD R
2002 SCOTTWOOD
ANN ARBOR MI 48104

GEO H KOEPKE MD
UNIVERSITY HOSPITAL
ANN ARBOR MICH 48104

EMRE KOKMEN MD
UNIV MEDICAL CENTER
ANN ARBOR MI 48104

KENNETH A KOOI MD
2132 NEEDHAM RD
ANN ARBOR MICHIGAN 48104

RICHARD O KRAFT MD
959 MAIDEN LANE
ANN ARBOR MI 48105

CHAS F KRAUSSE MD
116 PARK ST
CHELSEA MICHIGAN 48118

EDMUND M KRIGBAUM MD
3075 OVERRIDGE DR
ANN ARBOR MICHIGAN 48104

GLEN H KUMASAKA MD
1486 CEDAR BEND DR
ANN ARBOR MICHIGAN 48105

ISADORE LAMPE MD
1313 E ANN ST
ANN ARBOR MICH 48104

JACK LAPIDES MD
UNIVERSITY HOSPITAL
ANN ARBOR MICH 48104

CARLOS M LAUCHU MD
1277 WISTERIA DR
ANN ARBOR MI 48104

JOHN L LAW MD R
1116 41ST AVE E
SEATTLE WA 98102

GLENN O LEASE MD
3460 COTTONTAIL LANE
ANN ARBOR MI 48103

FRED LEE MD
1926 DAY ST
ANN ARBOR MI 48104

S M LINDENAUER MD
2711 ANTIETAM COURT
ANN ARBOR MI 48105

DIANA LITTLE MD
2200 FULLER RD
ANN ARBOR MI 48105

GAIL ANN LOCKEN MD
8255 W HURON RIVER DR
DEXTER MI 48130

HAROLD J LOCKETT MD
319 BROOKSIDE DR
ANN ARBOR MICH 48105

ROBERT G LOVELL M D
326 N INGALLS ST
ANN ARBOR MICHIGAN 48104

CLAUDE M LOWRY MD
1707 SHADFORD RD
ANN ARBOR MICH 48104

ALEXANDER R LUCAS MD
951 E LAFAYETTE
DETROIT MI 48207

KENNETH R MAGEE M D
1313 E ANN ST
ANN ARBOR MICH 48104

JOHN E MAGIELSKI MD
2355 LONDONDERRY RD
ANN ARBOR MICH 48104

HAROLD J MAGNUSON MD
SCHOOL OF PUBLIC HLTH
ROOM 1522
ANN ARBOR MI 48104

DUNCAN J J MAGOON MD
225 E LIBERTY
ANN ARBOR MI 48108

KARL D MALCOLM MD
311 N INGALLS ST
ANN ARBOR MICH 48104

JOHN E MALEY MD
5441 WALSH RD
WHITMORE LAKE MICH 48189

JOHN C MALL MD
16000 SHELDON RD
NORTHVILLE MI 48167

PHILIP M MARGOLIS MD
725 CITY CENTER BLDG
ANN ARBOR MI 48108

SHELDON F MARKEL MD
ST JOSPEH MERCY HOSP
ANN ARBOR MI 48104

WILLIAM MARTEL MD
2972 PARKRIDGE
ANN ARBOR MI 48103

DONALD W MARTIN MD
5 NORTH HAMILTON ST
YPSILANTI MICH 48197

JOYCE W MASON M D
1908 SCOTTWOOD
ANN ARBOR MICH 48104

STEPHEN C MASON III MD
820 E UNIVERSITY
ANN ARBOR MICH 48104

KENNETH P MATHEWS MD
1145 ABERDEEN DR
ANN ARBOR MICH 48104

WOLFGANG W MAY MD
BOX A
YPSILANTI MI 48197

VINCENT MAZZARELLA MD
207 FLETCHER
ANN ARBOR MI 48104

DAVID R MC CUBBREY MD
221 N SHELDON RD
PLYMOUTH MI 48170

JAMES A MCLEAN MD
1313 E ANN ST
ANN ARBOR MICH 48104

MALCOLM MCPHEE MD A
1308 PHAIR AVE NE
ALBERTA CANADA

CALGARY 61

JOHN R MC WILLIAMS MD
201 S MAIN ST
ANN ARBOR MICH 48108

JOSEPH M MEADOWS JR MD
2685 OVERRIDGE DR
ANN ARBOR MICH 48104

LOUIS W MEEKS MD
730 TOWNER
YPSILANTI MI 48197

PARVIZ MEGHNOT MD
740 EMERICK
YPSILANTI MI 48197

DAVID H MIDDLETON MD
UNIV OF MICH MED CTR
ANN ARBOR MICHIGAN 48104

WM K MILES MD A
UNIVERSITY HOSP
ANN ARBOR MI 48104

A F MILFORD JR M D
419 E MICHIGAN AVE
YPSILANTI MICHIGAN 48197

BARRY MILLER MD
326 N INGALLS
ANN ARBOR MI 48104

IRA I MILLER MD
1718 HERMITAGE RD
ANN ARBOR MICHIGAN 48104

NORMAN F MILLER MD L
820 N E 33RD ST
BOCA RATON FL 33432

GEO W MORLEY MD
UNIVERSITY HOSP
ANN ARBOR MICH 48104

JOE D MORRIS MD
1313 E ANN ST
ANN ARBOR MI 48104

AMIR M MOSTAGHIM MD
2480 NEWBURY CT
ANN ARBOR MI 48103

ROBERT H MOYAD MD
730 TOWNER
YPSILANTI MI 48197

JOHN MOYYAD MD
740 S EMERICK ST
YPSILANTI MICHIGAN 48197

WM A MURRAY MD
1705 COVINGTON DR
ANN ARBOR MICH 48103

JAMES W MYERS MD
217 N INGALLS
ANN ARBOR MI 48104

AHMED N M NASR MD
1352 MCINTYRE
ANN ARBOR MI 48105

REED M NESBIT MD L
645 N MICHIGAN AVE
JNT COMM ACCRED HOSP

CHICAGO ILL 60611

CHAS W NEWTON JR MD
2310 E STADIUM BLVD
ANN ARBOR MICH 48104

RICHARD D NICHOLS MD
HENRY FORD HOSP
DEPT OF OTO

DETROIT MI 48202

FAZLOLAH A NICKHAH MD
1320 ELLIS RD
YPSILANTI MI 48197

R H NISHIYAMA MD
2305 VINEWOOD
ANN ARBOR MI 48104

JOHN C NIXON MD
1155 GREEN RD
ANN ARBOR MICHIGAN 48105

RUDOLF E NOBEL MD
612 S FOREST
ANN ARBOR MICH 48104

JOSEPH R NOVELLO MD
UNIV OF MICHIGAN
ANN ARBOR MI 48103

GERALD A O CONNOR MD
ST JOSEPH MERCY HOSP
ANN ARBOR MICH 48104

PATRICIA A O CONNOR MD
110 MASON
ANN ARBOR MI 48103

JOHN OLARIU MD
BOX A
YPSILANTI MICHIGAN 48197

ROBERT M ONEAL MD
555 E WILLIAM #25J
ANN ARBOR MI 48108

JAMES B ORWIG MD A
1867 FT STOCKTON DR
SAN DIEGO CA 92103

L D OSTRANDER JR MD
2793 MANCHESTER RD
ANN ARBOR MICHIGAN 48104

MUSTAFA E OVACIK MD
1130 HILL ST
ANN ARBOR MI 48104

SELCUK M OZIL MD
PLYMOUTH STATE HOME
NORTHVILLE MI 48167

GENA R PAHUCKI MD
940 MAIDEN LANE
ANN ARBOR MI 48105

ALGERNON A PALMER MD L
110 E MIDDLE ST
CHELSEA MI 48118

MARIA J PALUSZNY MD
CHILDREN S PSYCH HOSP
ANN ARBOR MI 48104

PARVIZ PANAHI MD
2355 E STADIUM BLVD
ANN ARBOR MI 48104

MICHAEL PAPO MD
775 S MAIN ST
CHELSEA MI 48118

WALTER G PARKER MD A
745 BROOKS ST
ANN ARBOR MI 48103

FRANCIS C PASLEY MD
18471 HAGGERTY RD
NORTHVILLE MI 48167

SATYA P PASRICHA MD
YPSILANTI STATE HOSP
YPSILANTI MI 48197

FRED E PATTERSON MD
ST JOSEPH MERCY HOSP
ANN ARBOR MI 48104

BEVERLY C PAYNE MD
425 E WASHINGTON ST
ANN ARBOR MICHIGAN 48108

DELBERT E PEARSON MD
4660 WASHTENAW
ANN ARBOR MI 48104

MARLIN J PEARSON MD
2205 LAFAYETTE
ANN ARBOR MI 48104

JACK M PERLMAN MD
2664 ANTIETAM CT
ANN ARBOR MI 48105

EDWIN P PETERSON MD
L-2212 WOMENS HOSP
ANN ARBOR MI 48104

THOMAS R PETERSON MD
2015 MANCHESTER RD
ANN ARBOR MICH 48104

GUST C PETROPOULOS MD
2104 BROCKMAN BLVD
ANN ARBOR MI 48104

ROSWELL R PFISTER MD A
RETINA FOUNDATION
243 CHARLES ST
EAR & EYE INFIRMARY
BOSTON MASS 02114

RICHARD E PFRENDER MD M

EDWIN H PLACE MD R
2616 HAWTHORN RD
ANN ARBOR MI 48104

H MARVIN POLLARD MD
2012 VINEWOOD BLVD
ANN ARBOR MICH 48104

ROGER W POSTMUS MD
662 WEMBLEY CT
ANN ARBOR MICHIGAN 48103

MARCIA L POTTER MD
318 W CROSS ST
YPSILANTI MICH 48197

RHODA M POWSNER MD
1050 WALL ST
ANN ARBOR MI 48105

ANDREW K POZNANSKI MD
UNIV HOSP RADIOLOGY
ANN ARBOR MI 48104

STEPHEN N PRESTON MD
PARKE DAVIS & CO
ANN ARBOR MI 48105

LAWRENCE PREUSS MD
2133 DELAWARE DRIVE
ANN ARBOR MICHIGAN 48103

GORDON J PROUT MD
401 MILLS RD
SALINE MICH 48176

F L PURCELL MD
HYDROMATIC DIV
WILLOW RUN

YPSILANTI MI 48197

HUGO QUIROZ MD
26585 13 MILE RD
FRANKLIN MI 48025

JAMES W RAE JR MD
1313 E ANN ST
ANN ARBOR MICH 48104

HENRY K RANSOM MD L
721 SOUTH FOREST
ANN ARBOR MICH 48104

THEOPHILE RAPHAEL MD L
2734 PEACHTREE #C201
NW ATLANTA GA 30305

ROBERT RAPP MD
1460 CEDAR BEND DR
ANN ARBOR MI 48105

RIGDON K RATLIFF MD L
326 N INGALLS ST
ANN ARBOR MICH 48104

WM J REGAN JR MD
326 N INGALLS
ANN ARBOR MICH 48104

ROBT C REHNER MD
2378 E STADIUM BLVD
ANN ARBOR MICHIGAN 48104

RUDOLPH E REICHERT JR
1046 BALDWIN
ANN ARBOR MICH 48104

MELVIN J REINHART MD
1921 HAMPTON CT
ANN ARBOR MICHIGAN 48103

WM R REKSHAN MD
47558 N SHORE DR
BELLEVILLE MI 48111

ELIZABETH J RICH MD

PEDLAR MILLS VA 24574

KATHRYN E RICHARDS MD
812 KUEBLER DR
ANN ARBOR MI 48103

DONALD D RIKER MD
706 W HURON
ANN ARBOR MI 48103

FRANK N RITTER MD
2675 ENGLAVE DR
ANN ARBOR MICH 48103

AMES ROBEY MD
BOX 2060
ANN ARBOR MI 48104

ORLO J ROBINSON JR MD
501 DUNLAP
NORTHVILLE MICH 48167

WM D ROBINSON MD
1405 E ANN ST
ANN ARBOR MICH 48104

WALDOMAR M ROESER MD
1660 ARLINGTON
ANN ARBOR MI 48104

C HOWARD ROSS MD L
1725 GLASTONBURY
ANN ARBOR MI 48103

DONALD L RUCKNAGEL MD
1141 CLAIRE CIRCLE
ANN ARBOR MICHIGAN 48103

SAM F RUSSO MD
9551 MAIN ST
WHITMORE LAKE MICH 48189

GARY S SANDALL MD
611 CHURCH ST
ANN ARBOR MI 48104

ALLEN SAUNDERS MD
2361 E STADIUM BLVD
ANN ARBOR MICH 48104

GEO S SAYRE MD
750 TOWNER
YPSILANTI MICH 48197

DONALD L SCHAEFER MD
201 E LIBERTY
ANN ARBOR MICHIGAN 48108

EVE M SCHLECTE MD
2307 HIGHLAND RD
ANN ARBOR MI 48104

C M SCHMIDT MD
959 MAIDEN LANE
ANN ARBOR MI 48105

DAVID W SCHMIDT MD
1230 N MAPLE RD
ANN ARBOR MI 48103

GERARD M SCHMIT MD
555 E WILLIAM
ANN ARBOR MI 48108

CHAS R SCHMITTER MD
2825 SEQUOIA PKWY
ANN ARBOR MI 48103

RICHARD C SCHNEIDER MD
1313 E ANN ST DEPT N S
ANN ARBOR MICH 48104

HENRY K SCHOCH MD
VETS ADMIN HOSP
ANN ARBOR MI 48105

MARVIN E SCHROCK MD
2310 E STADIUM BLVD
ANN ARBOR MI 48104

EVA P SCHROEDER MD A
YPSILANTI STATE HOSP
YPSILANTI MI 48197

WM E SCHUMACHER MD L
1475 STEIN RD
ANN ARBOR MI 48103

HERBERT SCHUNK MD
1061 COUNTRY CLUB DR
BLOOMFIELD HILLS MI 48013

HENRY A SCOVILL MD
1313 W CROSS ST
YPSILANTI MICH 48197

MAURICE H SEEVERS MD L
740 SPRING VALLEY DR
ANN ARBOR MICH 48105

MARIA Z SEGAT MD
455 HUNTINGTON DRIVE
ANN ARBOR MICH 48104

MELVIN L SELZER MD
609 E LIBERTY
ANN ARBOR MICH 48108

JAMES D SHADOAN MD
314 WASHINGTON ST
CHELSEA MI 48118

MOHAMMAD SHAFII MD A
CHILDRENS PSYCH HOSP
ANN ARBOR MI 48104

JULES SHAMMAS MD
2260 PRAIRIE
ANN ARBOR MI 48105

ROBERT A SHEIMAN MD A
80 CARTRIGHT APT 5H
BRIDGEPORT CONN 06604

JOHN C SHELTON MD
105 FERRIS
YPSILANTI MICHIGAN 48197

W W SHERVINGTON MD A
2794 PAGE ST
ANN ARBOR MI 48104

MUAIAD SHIHADEH MD
27 S PROSPECT ST
YPSILANTI MI 48197

HARRIET L SHOECRAFT MD
425 E WASHINGTON
ANN ARBOR MICHIGAN 48108

LOUIS E SIGLER JR MD
1443 COVINGTON DR
ANN ARBOR MICH 48103

JOHN F SIMPSON MD
DEPT OF NEUROLOGY
UNIV OF MICH HOSP

ANN ARBOR MI 48104

MAJ L R SIMSON MC M
113 SAGE DR
UNIVERSAL CITY TX 78148

OLGA SIROLA MD
1710 COLLEGEWOOD
YPSILANTI MICH 48197

JAMES C SISSON MD
2665 BALMORAL CT
ANN ARBOR MICHIGAN 48103

VERGIL N SLEE MD
P O BOX 1809
ANN ARBOR MICH 48106

JOHN W SMILLIE MD
1335 FAIRLANE DR
ANN ARBOR MICH 48104

DONALD C SMITH MD
326 VICTOR VAUGHAN BLG
ANN ARBOR MI 48104

EDWIN M SMITH MD
1815 ARBORDALE
ANN ARBOR MICH 48103

ELEANOR SMITH MD
425 E WASHINGTON ST
ANN ARBOR MICHIGAN 48108

RUSSELL F SMITH M D
9569 MAIN ST
WHITMORE LAKE MI 48189

THOMAS C SMITH MD
2800 PLYMOUTH RD
ANN ARBOR MI 48106

WILLIAM S SMITH MD
C4202 UNIVER MED CTR
ANN ARBOR MICHIGAN 48104

JAMES SONNEGA MD
HAWTHORN CENTER
NORTHVILLE MI 48167

EVANGELINE SPINDLER MD A
555 E WILLIAMS
ANN ARBOR MI 48105

GERALD A STAIR MD
740 SO EMERICK
YPSILANTI MI 48197

VERNON A STEHMAN MD
YPSILANTI STATE HOSP
YPSILANTI MI 48197

MAYNARD L STETTEN MD M
9355 ISLAND DR
GROSSE ILE MI 48138

GEORGINE M STEUDE MD
1450 BARDSTOWN
ANN ARBOR MI 48105

CYRUS W STIMSON MD
235 E 78TH ST
NEW YORK N Y 10021

WINNIFRED E STOREY MD
2311 E STADIUM BLVD
ANN ARBOR MI 48104

RUTH H STRANG MD
4500 E HURON RIVER DR
ANN ARBOR MI 48104

GEO J STRASCHNOV MD
1678 MERRIMAN RD
WAYNE MICHIGAN 48184

STANLEY R STRASIUS MD A
54650 EUSTIS ST
FORT KNOX KY 40121

JAMES N P STRUTHERS MD L
17617 EDINBOROUGH RD
DETROIT MI 48219

BRUCE T STUBBS MD A
812 MCKINLEY
CHELSEA MICHIGAN 48118

ERROL R SWEET MD
1076 ISLAND DR CT 104
ANN ARBOR MI 48105

ROBT B SWEET MD
1313 E ANN ST
ANN ARBOR MICH 48104

FULTON B TAYLOR MD
8898 ACRONE AVE
MILAN MI 48160

WM B TAYLOR MD
326 N INGALLS
ANN ARBOR MICHIGAN 48104

KENNETH W TEICH MD
1500 FIFTH AVE
MCKEESPORT HOSP

MCKEESPORT PA 15132

R WALLACE TEED MD L
215 S MAIN
ANN ARBOR MICH 48108

SIMA TEODOROVIC MD A
ST JOSEPH MERCY HOSP
ANN ARBOR MI 48104

E THURSTON THIEME MD
ST JOSEPH MERCY HOSP
ANN ARBOR MI 48104

GEORGE R THOMPSON MD
2656 PARKRIDGE DR
ANN ARBOR MICH 48103

WM C THOMPSON 111 MD
117 N WASHINGTON ST
YPSILANTI MI 48197

BARBARA A THREATT MD
U OF M HOSP RADIOLOGY
ANN ARBOR MI 48104

JOSEPH J TIZIANI MD
3412 BRASSOW
SALINE MI 48176

HARRY A TOWSLEY MD
W-5610 UNIV HOSP
ANN ARBOR MI 48104

J G TURCOTTE MD
769 HEATHERWAY
ANN ARBOR MICHIGAN 48104

JERROLD G UTSLER MD
ST JOSEPH MERCY HOSP
ANN ARBOR MI 48104

W C VANDER YACHT MD
203 RUSSELL ST
SALINE MI 48176

VERNE L VAN DUZEN MD L
131 E MILLER
MILAN MI 48160

WIECHER H VANHOUTEN MD
UNIV MEDICAL CTR
ANN ARBOR MI 48104

F S VAN REESEMA MD
1608 KIRTLAND DR
ANN ARBOR MI 48103

NEAL A VANSELOW MD
2906 PARKRIDGE DR
ANN ARBOR MI 48103

JOHN J VOORHEES MD
UNIV MEDICAL CTR
ANN ARBOR MI 48104

PIETER D VREEDE MD
PARKE DAVIS & CO
ANN ARBOR MI 48105

R WALTER WAGGONER MD L
3333 GEDDES RD
ANN ARBOR MICH 48105

ALEXANDER M WALDRON MD
309 N INGALLS
ANN ARBOR MICH 48104

JERRY L WALDYKE MD
775 S MAIN ST
CHELSEA MI 48118

J E WALKER MD A
R-5022 KRESEGE BLDG
ANN ARBOR MI 48104

SARA E WALKER MD
1405 ANN ST
ANN ARBOR MI 48104

JULIUS M WALLNER MD
1313 E ANN ST
ANN ARBOR MICH 48104

RICHARD D WATKINS MD
4140 MILLER
ANN ARBOR MI 48103

ERNEST H WATSON MD R
834 SUNSET DR
EVANSVILLE IND 47713

WALTER L WEBB MD A
ST JOSEPH MERCY HOSP
ANN ARBOR MI 48104

MYRON E WEGMAN MD
UNIV OF MICH
ANN ARBOR MICHIGAN 48104

RAOUL L WEISMAN MD
21 SO PROSPECT
YPSILANTI MICH 48197

JOHN M WELLER M D
B2915 UNIVERSITY HOSP
ANN ARBOR MICHIGAN 48104

JAMES L WERTH MD A
U OF M HOSPITAL
ANN ARBOR MI 48104

GEO W WESTCOTT MD
511 W MICHIGAN
YPSILANTI MI 48197

MARTHA R WESTERBERG MD
1313 E ANN ST
ANN ARBOR MI 48104

CHAS J WESTOVER MD
1340 ELM
PLYMOUTH MI 48170

ROBT G WETTERSTROEM MD
501 W DUNLAP
NORTHVILLE MICH 48167

ARNOLD H WEXLER MAJ M
USAF HOSP BITBURG
BOX 6057

APO NEW YORK N Y 09132

EDMUND H WHALE MD
207 FLETCHER AVE
ANN ARBOR MICH 48104

W M WHITEHOUSE MD
1313 E ANN STREET
ANN ARBOR MICHIGAH 48104

MARIANNE WHOWELL MD
1805 IVYWOOD DR
ANN ARBOR MICHIGAN 48103

PAUL J WICHT MD
750 TOWNER
YPSILANTI MICH 48197

HOWARD R WILLIAMS MD
1950 MANCHESTER RD
ANN ARBOR MICH 48104

FREDK B WILLIAMSON MD
319 W MICHIGAN AVE
YPSILANTI MICH 48197

PARK W WILLIS III MD
UNIVERSITY HOSPITAL
ANN ARBOR MICH 48104

J ROBERT WILLSON MD
UNIV MED CENTER
ANN ARBOR MICHIGAN 48104

J LEROY WILSON MD L
1313 E ANN ST
ANN ARBOR MICH 48104

LARRY K WINEGAR MD A
UNIV MEDICAL CTR
ANN ARBOR MI 48104

JAMES M WINKLER MD
3 REGENT COURT
ANN ARBOR MICH 48104

LEONARD H WOLIN MD
2216 MEDFORD RD
ANN ARBOR MI 48104

J REIMER WOLTER MD
UNIVERSITY MED CENTER
ANN ARBOR MICHIGAN 48104

R T WOODBURNE PHD A
2520 HAWTHORNE RD
ANN ARBOR MI 48104

SCOTT W WOODS MD
750 TOWNER
YPSILANTI MICHIGAN 48197

BRUCE A WORK JR MD
L-2019 WOMENS HOSP
ANN ARBOR MI 48104

WALTER P WORK MD
UNIVERSITY MED CENT
ANN ARBOR MICHIGAN 48104

HAROLD L WRIGHT MD
18741 HAGGERTY
NORTHVILLE MICHIGAN 48167

JOHN S WYMAN MD
SNOW HLTH SERVICE-EMU
YPSILANTI MI 48197

WILLIAM C YAROCH MD
2200 FULLER RD
ANN ARBOR MI 48105

FRANK S YELIN MD A
TEXAS MEDICAL CENTER
DIV OF NEUROSURGERY

HOUSTON TEXAS 77025

ORUS R YODER MD L
700 CAMBRIDGE RD
YPSILANTI MI 48197

C J D ZARAFONETIS MD
SIMPSON MEMORIAL INST
ANN ARBOR MI 48106

VICTOR M ZERBI MD
27 S PROSPECT
YPSILANTI MICH 48197

ROBERT M ZIMMERMAN MD
555 E WILLIAMS
ANN ARBOR MI 48108

JOEL P ZRULL MD
630 DARTMOOR
ANN ARBOR MICHIGAN 48103

E K ZSIGMOND MD
UNIVERSITY OF MICH
ANN ARBOR MI 48104

WAYNE

ALI A ABBASI MD
DETROIT GENERAL HOSP
DETROIT MI 48226

A ABBASSIAN MD
3815 PELHAM
DEARBORN MI 48124

JAMES A ABBOTT MD
810 MUTUAL BLDG
DETROIT MI 48226

GERALD J ABEN MD
15901 W 9 MILE RD
SOUTHFIELD MI 48075

ELIE D ABOULAFIA MD
18241 GREENFIELD
DETROIT MI 48235

JOS P ABRAHAM MD
2799 W GRAND BLVD
DETROIT MI 48202

JULIO B ACOSTA MD
27634 FIVE MILE RD
LIVONIA MI 48154

GERALD D ADAMIAN MD
15901 W 9 MILE RD
SOUTHFIELD MI 48075

JAMES R ADAMS MD A
39 SHADY HOLLOW DR
DEARBORN MI 48128

VINCENT B ADAMS MD
19641 MACK AVE
GROSSE PTE MI 48236

ARTHUR ADAMSKI MD
19600 VAN DYKE
DETROIT MI 48234

IRWIN P ADELSON MD A
DETROIT PSYCH INSTIT
1151 TAYLOR

DETROIT MI 48202

SIDNEY L ADELSON MD
16221 SCHOOLCRAFT
DETROIT MI 48227

SIDNEY ADLER MD
3011 W GRAND BLVD
DETROIT MI 48202

MANOOCHEHR AGAH MD
6765 ORCHARD LAKE RD
ORCHARD LAKE MI 48033

GEO H AGNEW MD
3011 W GRAND BLVD
DETROIT MI 48202

RICHARD C AGNEW MD M
564 FISHER BLDG
DETROIT MI 48202

JOSEPH J AGRESTA MD A
WAYNE STATE UNIV
DETROIT MI 48207

JAS J AIUTO MD
660 CADIEUX RD
GROSSE PTE MI 48230

ISSA S AJLOUNI MD
2075 E 14 MILE RD
BIRMINGHAM MI 48008

ROGER M AJLUNI MD
17920 FARM RD
LIVONIA MI 48152

EMIL J ALBAN JR MD
7940 ALLEN RD
ALLEN PARK MI 48101

A P ALBARRAN MD
WAYNE CO GEN HOSP
ELOISE MICH 48132

ALBERT J ALBRECHT MD
15901 W NINE MILE RD
SOUTHFIELD MI 48075

ELSA A ALCANTARA MD
9801 CONANT
DETROIT MI 48212

LUCILO C ALCANTARA MD
9801 CONANT
DETROIT MI 48212

ALLEN ALEXANDER MD
18881 HILTON
SOUTHFIELD MI 48075

EUGENE J ALEXANDER MD
34830 SPRINGVALLEY
WESTLAND MI 48185

G O ALEXANDER MD
25799 LATHRUP BLVD
SOUTHFIELD MI 48075

L C ALEXANDER MD
1204 KALES BLDG
DETROIT MI 48226

MANUEL A ALFONSO MD
21501 KELLY RD
EAST DETROIT MI 48021

ELVIS S ALFORD MD
20 LIBERTY ST
BELLEVILLE MI 48111

SHAFQAT ALI MD
115 E DUNLAP
NORTHVILLE MI 48167

ROBERT D ALLABEN MD
18255 W MCNICHOLS RD
DETROIT MI 48219

HUBERT M ALLEN MD
HENRY FORD HOSPITAL
DETROIT MI 48202

JOHN V ALLEN MD
1336 SOUTHFIELD RD
LINCOLN PARK MI 48146

J SCOTT ALLEN MD
16820 GREENFIELD
DETROIT MI 48235

MUFID B AL-NAJJAR MD A
NORTHVILLE STATE HOSP
NORTHVILLE MI 48167

E BRYCE ALPERN MD
2840 W 7 MILE RD
DETROIT MI 48221

SAM ALPINER MD
2850 E SEVEN MILE RD
DETROIT MI 48234

MUHYI H AL-SARRAF MD
4160 JOHN R ST
DETROIT MI 48201

JULES ALTMAN MD
14633 E SEVEN MILE RD
DETROIT MI 48205

RAPHAEL ALTMAN MD
17000 WEST 8 MILE RD
SOUTHFIELD MI 48075

HERNAN ALVAREZ JR MD
HENRY FORD HOSP
DETROIT MI 48202

JULIAN ALVAREZ MD
260 LAKELAND
GROSSE PTE MI 48236

VICTOR M ALVAREZ MD
3745 MONROE
DEARBORN MI 48124

ROMULO S ANCOG MD
1151 TAYLOR
DETROIT MI 48202

LOURDES V ANDAYA MD
HARPER HOSPITAL
DETROIT MI 48201

BEVERLY L ANDERSON MD
977 SEXTON RD
HOWELL MI 48843

CHAS P ANDERSON MD
MEDICAL DIRECTOR
DEPT OF SOCIAL SERV
640 TEMPLE AVE
DETROIT MI 48201

EUGENE C ANDERSON MD
14801 SOUTHFIELD
ALLEN PARK MI 48101

WALTER L ANDERSON MD
1553 WOODWARD AVE
DETROIT MI 48226

WM B ANDERSON MD
966 FISHER BLDG
DETROIT MI 48202

BYRON ANDREOU MD
460 EASTLAND CTR
HARPER WOODS MI 48237

RAHSAN ANISOGLU MD
18126 SHADBROOK
NORTHVILLE MI 48167

DOMENICO M ANNESSA MD L
3536 BURNS AVE
DETROIT MI 48214

MARY K ANSLEY MD
1101 DAV WHITNEY BLDG
DETROIT MI 48226

RICHARD D ANSLOW MD
1515 DAV WHITNEY BLDG
DETROIT MI 48226

HOWARD B APPELMAN MD
1553 WOODWARD AVE
DETROIT MI 48226

AGUSTIN ARBULU MD
1400 CHRYSLER FREEWAY
DETROIT MI 48207

RENE F ARCHAMBAULT MD
35550 MICHIGAN AVE
WAYNE MI 48184

EDUARDO ARCINIEGAS MD
3535 W 13 MILE RD #205
ROYAL OAK MI 48072

BURKE W AREHART MD
340 EASTLAND BLDG
DETROIT MI 48236

NORMAN J ARENDS MD
302 EASTLAND PROF BLDG
DETROIT MI 48236

JOHN G ARENT MD
12600 1/2 GR RIVER AVE
DETROIT MI 48204

MOHAMMAD A ARIANI MD
EASTLAND PROF BLDG 314
HARPER WOODS MI 48225

ULVE E ARIES MD
HERMAN KIEFER HOSP
DETROIT MI 48202

C T ARIES MD
27216 CECILE AVE
DEARBORN HEIGHTS MI 48127

SEVERO R ARMADA JR MD
32900 FIVE MILE RD
LIVONIA MI 48154

THOS C ARMINSKI MD
1066 FISHER BLDG
DETROIT MI 48202

MAC J ARMSTRONG MD
441 E JEFFERSON AVE
DETROIT MI 48226

A ROBERT ARNSTEIN MD
285 HAWTHORNE
BIRMINGHAM MI 48009

MORRIS ARNKOFF MD
18241 GREENFIELD
DETROIT MI 48235

WM J ARNOLD JR MD
12062 BROAD ST
DETROIT MI 48204

FORREST J ARNOLDI MD
HARPER HOSPITAL
DETROIT MI 48201

ROBYN J ARRINGTON MD
7811 OAKLAND AVE
DETROIT MI 48211

MEYER S ASCHER MD
1508 DAV BRODERICK TWR
DETROIT MI 48226

STILSON R ASHE MD L
23030 CHERRY HILL
DEARBORN MI 48124

LOWELL B ASHLEY MD R
5811 N E 21 RD
FT LAUDERDALE FL 33308

REGIS F ASSELIN MD
11417 WHITTIER
DETROIT MI 48224

MOHAMMED A ASSI MD
18161 W 12 MILE RD
LATHRUP VILLAGE MI 48075

MAX E AUBLE MD
15901 W NINE MILE RD
SOUTHFIELD MI 48075

HARRY E AUGUST MD L
26339 WOODWARD
HUNTINGTON WOODS MI 48070

DONALD C AUSTIN MD
3800 WOODWARD AVE
DETROIT MI 48201

SHIRLEY AUSTIN MD
5224 ST ANTOINE ST
DETROIT MI 48202

JOHN D AUSUM MD
16311 MIDDLEBELT
LIVONIA MI 48154

IRA AVRIN MD
24777 GREENFIELD RD
SOUTHFIELD MI 48075

ARNOLD R AXELROD MD
15001 W EIGHT MILE RD
DETROIT MI 48235

MILDRED A AXELROD MD
3535 W 13 MILE RD 305
ROYAL OAK MI 48072

AHMAD N AZAR MD
20340 HARPER
DETROIT MI 48225

FARIS J AZOURY MD
DETROIT GENERAL HOSP
DETROIT MI 48226

MANUEL AZUARA MD
19150 KELLY RD
DETROIT MI 48236

LLOYD K BABCOCK MD L
5555 CRABTREE RD
BIRMINGHAM MI 48010

MYRA E BABCOCK MD L
7 POPLAR PARK
PLEASANT RIDGE MI 48069

PAUL W BABCOCK MD
29927 W SIX MILE RD
LIVONIA MI 48152

WARREN W BABCOCK MD R
2661 NORTH EAST 9TH CT
POMPANO BEACH FL 33062

BURTON J BACHER M D
1015 KALES BLDG
DETROIT MI 48226

VINTON A BACON MD L
18984 FAIRFIELD
DETROIT MI 48221

BENJ H BADER MD
2654 W GRAND BLVD
DETROIT MI 48208

MARGA BAER MD
16321 MACK AVE
DETROIT MI 48224

WALTER BAER MD
16321 MACK AVENUE
DETROIT MI 48224

ROBT J BAHRA MD
20905 GREENFIELD
SOUTHFIELD MI 48075

SHARIF BAIG MD
25750 W OUTER DR
LINCOLN PARK MI 48146

LOUIS J BAILEY MD L
20905 GREENFIELD RD
SOUTHFIELD MI 48075

MARGARET A BAIMA MD
1212 DAV WHITNEY BLDG
DETROIT MI 48226

CLARENCE BAKER MD L
5946 EASY ST
BAYSHORE GARDENS K-34

BRADENTON FL 33505

GRAEME C BAKER MD
DETROIT GENERAL HOSP
DETROIT MI 48226

JOHN D BAKER MD A
DETROIT GENERAL HOSP
DETROIT MI 48226

NIHAT BAKIRCI MD
2200 E GRAND BLVD
DETROIT MI 48211

JOSEPH A BAKST MD L
10 W WARREN
DETROIT MI 48201

FRANK T BALAGA MD
13000 ECKLES RD
LIVONIA MI 48151

HARRY BALBEROR MD
22341 W 8 MILE RD
DETROIT MI 48219

MATTHEW A BALCERSKI MD
855 FISHER BLDG
DETROIT MI 48202

DONALD R BALLARD MD
20520 AUDETTE
DEARBORN MI 48124

JANOS BALOG MD
2300 OAK ST
WYANDOTTE MI 48192

ROSS M BALOW MD
18700 MEYERS RD
DETROIT MI 48235

DONALD L BALTZ MD
24230 MICHIGAN
DEARBORN MI 48124

GERALD BANISH MD
23100 CHERRY HILL
DEARBORN MI 48124

THOMAS L BANKS MD
18597 W 10 MILE RD
SOUTHFIELD MI 48075

LEWIS R BARAK MD
20905 GREENFIELD RD
NORTHLAND MEDICAL BLDG
SUITE 503
SOUTHFIELD MI 48075

STUART BARAK MD
18241 GREENFIELD
DETROIT MI 48235

ALPHONSE W BARAN MD
15841 W WARREN ST
DETROIT MI 48228

LOUIS C BARBAGLIA MD
16378 HARPER
DETROIT MI 48224

RADIVOJ R BARBER MD
864 S MAIN ST
PLYMOUTH MI 48170

M B BARDENSTEIN MD
17000 W 8 MILE RD
SOUTHFIELD MI 48075

ALWIN S BAREFIELD MD
10244 W 7 MILE RD
DETROIT MI 48221

BENJ BARENHOLTZ MD
20905 GREENFIELD
SOUTHFIELD MI 48075

OSCAR G BARILLAS MD
21308 MACK AVE
GROSSE PTE WOODS MI 48236

DAVID H BARKER MD
21510 HARPER AVE
ST CLAIR SHORES MI 48080

OSCAR BARLAND MD A
8401 WOODWARD AVE
DETROIT MI 48202

REUVEN BAR-LEVAV MD
828 FISHER BLDG
DETROIT MI 48202

MYRON BARLOW MD
18050 MACK
GROSSE PTE MI 48236

MORTON BARNETT MD
735 ARDMOOR RD
BIRMINGHAM MI 48010

DANIEL R BARR MD
1025 DAV WHITNEY BLDG
DETROIT MI 48226

RAYMOND J BARRETT MD
3800 WOODWARD #1202
DETROIT MI 48201

WYMAN D BARRETT MD L
362 MCKINLEY
GROSSE PTE FARMS MI 48236

WM H BARRON MD A
2147 E MAPLE
BIRMINGHAM MI 48008

DAVID BARSKY MD
100 OAK ST
WYANDOTTE MI 48192

EDW G BARTHOLOMEW MD
SINAI HOSPITAL
DETROIT MI 48235

ROBERT J BARUCH MD
19181 CHELTON
BIRMINGHAM MI 48009

SIDNEY BASKIN MD
19630 W MCNICHOLS
DETROIT MI 48219

NAIL BASMAJI MD
19647 JOY RD
DETROIT MI 48228

JOSEPH S BASSETT MD
20905 GREENFIELD RD
SOUTHFIELD MI 48075

EROL BASTUG MD
W OUTER DR HOSPITAL
LINCOLN PARK MI 48146

GAYLORD S BATES MD
18101 OAKWOOD BLVD
DEARBORN MI 48124

JOHN M BATTLE MD
6904 CHARLESWORTH
DEARBORN HEIGHTS MI 48127

A ROBT BAUER MD L
19268 GRAND RIVER AVE
DETROIT MI 48223

BENEDICT J BAUER MD
16451 SCHOOLCRAFT
DETROIT MI 48227

RALPH E BAUER MD
HENRY FORD HOSPITAL
DETROIT MI 48202

RAYMOND B BAUER MD
HARPER HOSPITAL
DETROIT MI 48201

EVELYN F BAUGH MD
9191 WHITTIER
DETROIT MI 48224

RICHARD H BAUGH MD
24216 MICHIGAN AVE
DEARBORN MI 48124

ROBERT F BAUGH MD
9191 WHITTIER
DETROIT MI 48224

MOE BAUMER MD
10 PETERBORO
DETROIT MI 48201

ELDEN C BAUMGARTEN MD L
1062 LOCHMOOR BLVD
GROSSE PTE WOODS MI 48236

THOS W BAUMGARTEN MD
20867 MACK AVE
GROSSE PTE MI 48236

JOAQUIN P BAUTISTA MD M
20212 FLEMING
DETROIT MI 48234

SEYMOUR BAXTER MD
1160 FORREST LANE
BIRMINGHAM MI 48010

GILBERT M BAZIL MD
14200 PURITAN
DETROIT MI 48227

JOSEPH M BEALS MD
17894 MACK
GROSSE POINTE MI 48224

A DUANE BEAM MD
20160 MACK AVE
GROSSE PTE WOODS MI 48236

GEO D BEAMER MD
15212 MICHIGAN AVE
DEARBORN MI 48126

JAMES E BEARD MD
1365 CASS AVE
DETROIT MI 48226

JACQUES BEAUDOIN MD
17770 MACK
GROSSE POINTE MI 48224

ABRAHAM BECKER MD
3790 WOODWARD AVE
DETROIT MI 48201

VICTORIA L BECKETT MD A
714 BLDG & LOAN BLDG
C/O ROSEMARY SCOTT

GRAND RAPIDS MI 49502

CLARENCE L BECKLEIN MD L
14351 E WARREN AVE
DETROIT MI 48215

HUGH BECKMAN MD
20001 GREENFIELD
DETROIT MI 48235

CARL C BECKWITH MD
15865 WYOMING
DETROIT MI 48238

WM L BEDWELL MD
1211 KALES BLDG
DETROIT MI 48226

WILLARD E BEEBE MD
7636 ALLEN RD
ALLEN PARK MI 48101

G JAN BEEKHUIS MD
1326 ST ANTOINE ST
DETROIT MI 48226

BILLY BEEKS MD
8824 PURITAN
DETROIT MI 48238

ROBT C BEHAN MD
1 WOODWARD AVE
DETROIT MI 48226

MAX R BEITMAN MD
510 KALES BLDG
DETROIT MI 48226

KHOSROW BEIZAI MD
22101 MOROSS RD
DETROIT MI 48236

JUAN BELAMARIC MD
1400 CHRYSLER EXPWY
DETROIT MI 48207

W GEO BELANGER MD
1041 HARVARD
DETROIT MI 48230

DARWIN F BELDEN MD
2424 PURITAN
DETROIT MI 48238

CLAUDE BENAVIDES MD
25750 W OUTER DR
LINCOLN PARK MI 48146

SANDOR F BENDE MD
15863 GARFIELD
ALLEN PARK MI 48101

JOSEPH BENINSON MD
HENRY FORD HOSP
DETROIT MI 48202

GERMANY E BENNETT MD
1446 E FOREST
DETROIT MI 48207

HARRY B BENNETT MD L
7015 INTERVALE
DETROIT MI 48238

H STANLEY BENNETT MD
15101 SOUTHFIELD
ALLEN PARK MI 48101

RONALD S BENNETT MD
17727 W 10 MILE RD
SOUTHFIELD MI 48075

SANFORD A BENNETT MD
15301 W NINE MILE RD
OAK PARK MI 48237

W ROBERT C BENNETT MD
3800 WOODWARD AVE
DETROIT MI 48201

ARVIN BENNISH MD
17040 W 12 MILE RD 101
SOUTHFIELD MI 48076

CLIFFORD D BENSON MD
1553 WOODWARD AVE
DETROIT MI 48226

DAVIS A BENSON MD
17563 GREENFIELD
DETROIT MI 48235

PAUL J BENSON MD
227 N SHELDON RD
PLYMOUTH MI 48170

VIRGINIA M BENSON MD L
29224 LANCASTER BLDG 4
SOUTHFIELD MI 48075

ROBERT H BENTLEY MD
21510 HARPER AVE
ST CLAIR SHORES MI 48080

WM G BENTLEY MD
50 WESTMINSTER
DETROIT MI 48202

PEDRO P BERDAYES MD
15345 WINDMILL PTE DR
GROSSE PTE MI 48236

EDWIN L BERGER MD
7301 SCHAEFER RD
DEARBORN MI 48126

MURRAY S BERGMAN MD
4400 LIVERNOIS AVE
DETROIT MI 48210

HOWARD L BERGO MD
901 W GRAND BLVD
DETROIT MI 48208

KENNETH BERGSMAN MD
DEPT OF MEDICINE
DETROIT GENERAL HOSP

DETROIT MI 48226

ERNEST M BERKAS MD
3815 PELHAM RD
DEARBORN MI 48124

JOSEPH J BERKE MD
3333 E JEFFERSON
DETROIT MI 48207

SYDNEY S BERKE MD
3333 E JEFFERSON
DETROIT MI 48207

LARY R BERKOWER MD
20905 GREENFIELD
SOUTHFIELD MI 48075

ALLEN B BERLIN MD
17000 W 8 MILE RD
SOUTHFIELD MI 48075

MARTIN B BERMAN MD
29927 W SIX MILE RD
LIVONIA MI 48152

ROBT H BERMAN MD L
2111 WOODWARD
DETROIT MI 48201

SIDNEY L BERMAN MD L
60 W HANCOCK
DETROIT MI 48201

HENRI BERNARD MD
414 DAV WHITNEY BLDG
DETROIT MI 48226

WALTER G BERNARD MD L
910 CHALMER
DETROIT MI 48215

BERNARD BERNBAUM MD L
13345 W SIX MILE RD
DETROIT MI 48235

SAML S BERNSTEIN MD
15901 W 9 MILE RD
SOUTHFIELD MI 48075

CONRAD F BERNYS MD
3815 PELHAM
DEARBORN MI 48124

WILLIAM L BERRIDGE MD
CHEVROLET MOTOR CO
LIVONIA MI 48151

JOS E BERRY MD
31648 BELLA VISTA
FARMINGTON MI 48024

KARL R BERTRAM MD
461 FISHER BLDG
DETROIT MI 48202

THOS H E BEST MD L
9221 E JEFFERSON AVE
DETROIT MI 48214

G BETANZOS MD
22770 KELLY
E DETROIT MI 48021

FRANCIS P BHAGAT MD
861 MONROE
DEARBORN MI 48124

KUNJLATA M BHATT MD
SINAI HOSPITAL
DETROIT MI 48235

MICHAEL H BIALIK MD
15212 MICHIGAN AVE
DEARBORN MI 48126

FRANK B BICKNELL MD
938 DAV WHITNEY BLDG
DETROIT MI 48226

JOHN G BIELAWSKI MD
22190 GARRISON
DEARBORN MI 48124

JOHN H BIHL MD
10531 FARMINGTON RD
LIVONIA MI 48150

THOS H BILLINGSLEA MD
3790 WOODWARD
DETROIT MI 48202

PHILIP M BINNS MD
573 FISHER BLDG
DETROIT MI 48202

JOHN R BIRCH MD L
1438 S OCEAN BLVD
POMPANO BEACH FL 33062

ROBERT E BIRK MD
17894 MACK AVE
DETROIT MI 48224

ROBERT C BIRKS MD
VA HOSPITAL
ALLEN PARK MI 48101

F ROSS BIRKHILL MD
31 SHADY HOLLOW DR
DEARBORN MI 48124

D J BIRMINGHAM MD
WAYNE STATE UNIV
DETROIT MI 48207

LEONARD BIRNDORF MD
18317 JOHN R ST
DETROIT MI 48203

G W BISSELL MD
VA HOSPITAL
ALLEN PARK MI 48101

NORBERT M BITTRICH MD
16001 9 MILE RD
SOUTHFIELD MI 48075

EARL D BLACK MD
20340 HARPER
HARPER WOODS MI 48236

ROBERT W BLACK MD
408 DAV WHITNEY BLDG
DETROIT MI 48226

ALEXANDER BLAIN 111 MD
2201 E JEFFERSON
DETROIT MI 48207

JAMES H BLAIN JR MD
935 GRAND MARAIS
DETROIT MI 48230

MAX BLAINE MD
13700 WOODWARD
DETROIT MI 48203

WM F BLAIR MD
12500 E 12 MILE RD
WARREN MI 48093

RUSSELL S BLANCHARD MD
3724 JACKSON ST
OMAHA NEBRASKA 68105

DOUGLAS H BLANKS MD
12811 NORTHLINE
SOUTHGATE MI 48195

RONALD W BLATT MD
32226 TALL TIMBER DR
FARMINGTON MI 48024

ALFRED BLEIER MD A
1583 CANYON EST DR
PALM SPRINGS CA 92262

DAVID H BLINKHORN MD
8445 JEFFERSON
DETROIT MI 48214

O L BLOCK MD MED DIR
FORD MOTOR CO
THE AMERICAN RD

DEARBORN MI 48121

MELVIN A BLOCK MD
2799 W GRAND BLVD
DETROIT MI 48202

JAMES B BLODGETT MD L
3535 W 13 MILE RD #406
ROYAL OAK MI 48072

WM H BLODGETT MD
74 W ADAMS AVE
DETROIT MI 48226

MARSHALL J BLONDY MD
19201 W SEVEN MILE RD
DETROIT MI 48219

ALBERT BLOOM MD
6484 CHENE ST
DETROIT MI 48211

ARTHUR R BLOOM MD L
16500 N PARK DR #1406
SOUTHFIELD MI 48075

VICTOR BLOOM MD
951 E LAFAYETTE
DETROIT MI 48207

ROBT J BLOOR MD
WM BEAUMONT HOSPITAL
ROYAL OAK MI 48072

ROSEMARIE BLOSEN MD
20070 E RIVER RD
GROSSE ILE MI 48138

GILBERT B BLUHM MD
HENRY FORD HOSP
DETROIT MI 48202

GEORGE L BLUM MD
15901 W 9 MILE RD
SOUTHFIELD MI 48075

FRANK S BLUMENTHAL MD
261 MACK BLVD
DETROIT MI 48201

ABRAHAM BLUMER MD
22341 W EIGHT MILE RD
DETROIT MI 48219

ANTONIO BOBA MD
1400 CHRYSLER EXPWY
DETROIT MI 48207

JOHN L BOCCACCIO MD
332 EASTLAND CENTER
PROFESSIONAL BLDG

DETROIT MI 48225

JAMES J BOCCIA MD
3450 S OCEAN #422
PALM BEACH FL 33480

ARTHUR W BODDIE MD
2737 CHENE ST
DETROIT MI 48207

ROBT E BOGUE MD
15901 W 9 MILE RD #604
SOUTHFIELD MI 48075

LADISLAUS BOGUSZ MD R
29215 MARANYA RD
HOMESTEAD FL 33030

Z STEPHEN BOHN MD
3800 WOODWARD AVE
DETROIT MI 48201

A WAITE BOHNE MD
HENRY FORD HOSP
DETROIT MI 48202

JOHN R BOLAND MD R
BOX 50
GRAND MARAIS MI 49839

MURRAY BOLES MD
26381 DUNDALK LANE
FARMINGTON MI 48024

DONALD S BOLSTAD MD
HENRY FORD HOSP
DETROIT MI 48202

SIDNEY BOLTER M D
6760 WOODBANK
BIRMINGHAM MI 48010

NORMAN BOLTON MD
19321 GREENFIELD
DETROIT MI 48235

RUSSELL P BOLTON JR MD
18530 GRAND RIVER
DETROIT MI 48223

OTTO F W BONETA MD A
19697 CARRIE
DETROIT MI 48234

JAIME BONILLA MD
25447 PLYMOUTH RD
DETROIT MI 48239

ABRAHAM M BOOKSTEIN MD L
1725 PINECREST DR
FERNDALE MI 48220

GEO F BOONE MD
81 WOODLAND SHORES
GROSSE PTE SHORES MI 48236

EARNEST BOOTH MD
WOMANS HOSPITAL
DETROIT MI 48201

ROBERT G BORCHAK MD
17800 E EIGHT MILE
DETROIT MI 48236

IGOR I BORDEN MD
15361 PLYMOUTH RD
DETROIT MI 48227

LEO D BORES MD
962 FISHER BLDG
DETROIT MI 48202

MAURICE C BORIN MD A
29322 LANCASTER DR#203
SOUTHFIELD MI 48075

MELVIN BORNSTEIN MD
17600 NORTHLAND PK CT
SOUTHFIELD MI 48075

SIDNEY BORNSTEIN MD
28056 TAVESTOCK
SOUTHFIELD MI 48075

JOSE M BORREGO MD
1342 WHITTIER
GROSSE PTE MI 48236

EDMUND T BOTT MD
1629 FORD
WYANDOTTE MI 48192

ISADORE BOTVINICK MD
13701 W 7 MILE RD
DETROIT MI 48235

RODRICK E BOUCHER MD A
WAYNE STATE UNIV
DETROIT MI 48207

THOS A BOUTROUS MD
15801 W MC NICHOLS
DETROIT MI 48235

DONALD W BOWER MD
3725 FORT
LINCOLN PARK MI 48146

LEO J BOWERS MD
11200 E MCNICHOLS RD
DETROIT MI 48234

JAMES R BOWLBY MD
36000 FIVE MILE RD
LIVONIA MI 48154

ALBERT BOYAJIAN MD
17916 FARMINGTON
LIVONIA MI 48154

CHARLES R BOYCE MD
3790 WOODWARD AVE
DETROIT MI 48201

ALBERT L BOYD MD
4407 ROEMER
DEARBORN MI 48126

CAROLE B BOYD MD
1400 CHRYSLER EXPWY
DETROIT MI 48207

EUGENE H BOYLE MD
572 THORN TREE RD
GROSSE PTE WOODS MI 48236

RUTH B BRACKETT MD
18136 MACK
DETROIT MI 48224

HORACE F BRADFIELD MD
3008 E GRAND BLVD
DETROIT MI 48202

R JOHN BRADFIELD MD
18134 MACK AVE
DETROIT MI 48224

GEORGE T BRADLEY MD
3800 WOODWARD AVE
DETROIT MI 48201

WM N BRALEY MD L
12897 WOODWARD
DETROIT MI 48203

BENJ BRAND MD
1201 DAVID WHITNEY BLG
DETROIT MI 48226

ADOLFO J BRANE MD
LAFAYETTE CLINIC
DETROIT MI 48207

LIONEL BRAUN MD L
18520 W 7 MILE RD
DETROIT MI 48219

ROBERT A BRAUN MD
18610 HARTWELL AVE
DETROIT MI 48235

FRANK N BREDAU JR MD
24781 FIVE MILE RD
DETROIT MI 48239

VIOLA G BREKKE MD
369 GLENDALE ST
HIGHLAND PARK MI 48203

JOHN P BREMER MD
17700 MACK
DETROIT MI 48224

WM M BREMER MD
15641 E WARREN
DETROIT MI 48224

GERALD M BRENEMAN MD
28300 FOREST BROOK DR
FARMINGTON MI 48024

MICHAEL J BRENNAN MD
1168 THREE MILE DR
GROSSE PTE MI 48236

MORRIS S BRENT MD R
1330 STRATHCONA DR
DETROIT MI 48203

ROBERT L BRENT MD
954 FISHER BLDG
DETROIT MI 48202

BOYD K BRESNAHAN MD
25070 W EIGHT MILE RD
SOUTHFIELD MI 48075

NORMAN W BREY MD
1900 DAV BRODERICK TWR
DETROIT MI 48226

MURRAY BRICKMAN MD
24777 GREENFIELD
SOUTHFIELD MI 48075

WM J BRIGGS MD
1900 DAV BRODERICK TWR
DETROIT MI 48226

JACOB E BRISKI MD
1058 BLAIRMOOR
GROSSE PTE WOODS MI 48236

JOS C BRISSON MD R
23112 WESTBURY
ST CLAIR SHORES MI 48080

JOHN E BRISSON MD
17533 FORT ST
RIVERVIEW MI 48192

SYLVAN A BROADMAN MD
25705 MIDDLEBELT
FARMINGTON MI 48024

DONALD R BROCK MD
36475 FIVE MILE RD
LIVONIA MI 48154

HARVEY S BRODERSON MD R
5411 14TH ST W
BRADENTON FL 33505

WILLIAM BROMME MD L
17170 E JEFFERSON AVE
GROSSE PTE MI 48230

ALDRICH M BROOKS JR MD
2400 EWALD CIRCLE
DETROIT MI 48238

EUGENE M BROOKS MD
609 NORTHLAND MED BLDG
SOUTHFIELD MI 48075

NATHAN BROOKS MD
7401 3RD ST
DETROIT MI 48202

CHAS D BROSIUS MD
16981 FARMINGTON RD
LIVONIA MI 48154

WM L BROSIUS MD L
1823 FAIR OAK COURT
ROCHESTER MI 48063

ANDREW G BROWN MD
20905 GREENFIELD
SOUTHFIELD MI 48075

AUDREY D BROWN MD L
1795 CEDAR HILL DR
BIRMINGHAM MI 48010

CARLTON F BROWN MD
24636 WALDEN RD W
SOUTHFIELD MI 48075

CHAS H BROWN MD
2387 FORT ST
WYANDOTTE MI 48192

ELI M BROWN MD
13123 LA SALLE
HUNTINGTON WOODS MI 48070

GORDON T BROWN MD L
13000 HAYES AVE
DETROIT MI 48205

JAMES C BROWN MD
3800 WOODWARD AVE
DETROIT MI 48201

JOHN R BROWN MD
1145 DAV WHITNEY BLDG
DETROIT MI 48226

KENNETH A BROWN MD
17316 LIVERNOIS
DETROIT MI 48221

OSCAR A BROWN MD
1633 DAV WHITNEY BLDG
DETROIT MI 48226

RICHARD D BROWN MD
3800 WOODWARD AVE #808
DETROIT MI 48201

ROBT A BROWN MD A
3000 WESTFIELD CT
TRENTON MI 48183

SAUL BROWN MD
6890 WHITE PINE DR
BIRMINGHAM MI 48010

STANLEY H BROWN MD L
13 SUSAN CIRCLE
LAKE WORTH FL 33460

THOS A BROWN MD
5430 W WARREN AVE
DETROIT MI 48210

H H BROWNELL MD
8222 WOODCREST DR
GROSSE ILE MI 48138

PAUL G BROWNELL MD
18916 WOODWARD AVE
DETROIT MI 48203

ROBT C BRUDER MD
4520 FIRESTONE AVE
DEARBORN MI 48126

EDGAR S BRUER MD
12170 FORT ST
WYANDOTTE MI 48192

EDWIN L BRUER MD
12170 FORT ST
WYANDOTTE MI 48192

BROCK E BRUSH MD
2799 W GRAND BLVD
DETROIT MI 48202

MARTIN F BRUTON M D
23330 DOREMUS DR
ST CLAIR SHORES MI 48080

DONALD I BRYAN MD
15901 W 9 MILE RD
SOUTHFIELD MI 48075

RAYMOND E BUCK MD
1575 E LAFAYETTE
DETROIT MI 48207

ROBIN C BUERKI MD L
HENRY FORD HOSP
DETROIT MI 48202

JAN W BUETTGEN MD
10 CAIRNS
TECUMSEH MI 49286

F M BUMAGAT MD
METROPOLITAN HOSPITAL
DETROIT MI 48206

ROBERT H BURGE MD
23843 JOY RD
DEARBORN MI 48127

RALPH M BURKE MD
580 UNIVERSITY PL
GROSSE PTE MI 48236

THOMAS K BURNHAM MD
HENRY FORD HOSP
DETROIT MI 48202

ROBERT E BURNS M D
HENRY FORD HOSP
DETROIT MI 48202

ROBT T BURNS MD
11110 MORANG RD
DETROIT MI 48224

HOWARD B BURNSIDE MD
33 OAKLAND PARK
PLEASANT RIDGE MI 48069

DAVID BURNSTINE MD
18400 SCHAEFER
DETROIT MI 48235

PERRY P BURNSTINE MD L
2329 W GRAND BLVD
DETROIT MI 48208

ROSWELL G BURROUGHS MD
18161 W 12 MILE RD
LATHRUP VILLAGE MI 48075

HOWARD A BURROWS MD L
10423 W WARREN AVE
DEARBORN MI 48126

HARRY S BURSTEIN MD
2950 W GRAND BLVD
DETROIT MI 48202

I MARVIN BURSTEIN M D
2950 W GRAND BLVD
DETROIT MI 48202

IRVING F BURTON MD
26912 YORK RD
HUNTINGTON WOODS MI 48070

GLENDON J BUSH MD
18901 W MC NICHOLS
DETROIT MI 48219

JAMES E BUTLER MD
2177 W GRAND BLVD
DETROIT MI 48208

JOHN D BUTLER MD
2173 W GRAND BLVD
DETROIT MI 48208

LAWRENCE H BUTLER MD L
14521 EAST 7 MILE RD
DETROIT MI 48205

RICHARD G BUTLER MD
1922 MONROE
DEARBORN MI 48124

VOLNEY N BUTLER MD L
28 W ADAMS AVE
DETROIT MI 48226

EDWARD J BUTTRUM MD
14755 FENKELL ST
DETROIT MI 48227

GLEN L BYERS MD A
DETROIT GENERAL HOSP
DETROIT MI 48226

BYRON K BYRON MD
817 VIRGINIA PARK
DETROIT MI 48202

HECTOR H CABRAL MD
24860 RIVER HEIGHTS
SOUTHFIELD MI 48075

ENRIQUE CABRERA MD
30900 FORD RD
GARDEN CITY MI 48135

JOS L CAHALAN MD
15830 FORT ST
SOUTHGATE MI 48195

BERNARD J CAHN MD A
DUKE UNIV HOSP
DURHAM N C 27706

WALDO L CAIN MD
3800 WOODWARD AVE #804
DETROIT MI 48201

GEO L CALDWELL MD L
19005 FAIRFIELD
DETROIT MI 48221

JOHN R CALDWELL MD
2799 W GRAND BLVD
DETROIT MI 48202

REGIS L CALLAGHAN MD
22146 FORD RD
DEARBORN MI 48128

YANI V CALMIDIS MD
24800 CROMWELL
FRANKLIN MI 48025

EDGAR A CALVELD MD
1615 CARLTON BLVD
JACKSON MI 49203

JOHN G CALWELL MD
714 NEW CENTER BLDG
DETROIT MI 48202

ARTHUR H CAMERON MD L
155 VINEWOOD
WYANDOTTE MI 48192

DUNCAN A CAMERON MD
2021 MONROE
DEARBORN MI 48124

HARVEY E CAMPBELL MD
3 ROBINDALE CT
DEARBORN MI 48124

L F CAMPBELL MD
2843 MIDDLEBELT
PONTIAC MI 48053

MALCOLM D CAMPBELL MD L
1520 N GULLEY RD
DEARBORN MI 48128

ROBT E CAMPBELL MD
20901 MOROSS RD
DETROIT MI 48236

RUTH B CAMPBELL MD
3800 WOODWARD AVE #314
DETROIT MI 48201

THELMA M CAMPBELL MD
2355 MONROE BLVD
DEARBORN MI 48124

ENRIQUE CAMPS MD
1838 RUSSELL
DEARBORN MI 48128

E CANCINO SAMSON MD
18700 MEYERS RD
DETROIT MI 48235

HERBERT C CANTOR MD
26831 N WOODWARD
HUNTINGTON WOODS MI 48070

MEYER D CANTOR MD
4850 CHARING CROSS
BLOOMFIELD HILLS MI 48013

LAWRENCE A CANTOW MD
19291 WARRINGTON DR
DETROIT MI 48221

MARY E CANTRELL MD
HENRY FORD HOSP
DETROIT MI 48202

ELMER E CAPELLARI MD
810 MUTUAL BLDG
28 W ADAMS AVE

DETROIT MI 48226

DAVID B CAPOBRES MD
3001 E 7 MILE RD
DETROIT MI 48234

JOS M CAPUTO MD
2021 MONROE BLVD
DEARBORN MI 48124

NANCY T CAPUTO MD
17712 MACK AVE
GROSSE PTE MI 48236

EUGENE T CAPUZZI MD
19061 LACROSSE
LATHRUP VILLAGE MI 48075

JAMES E CARAWAY MD R
R1 BOX 503
FRANKLIN NC 28734

LOUIS CARBONE MD
487 LAKELAND
GROSSE PTE MI 48230

TOMAS CARBONELL MD
353 DEVONSHIRE
DEARBORN MI 48124

JOHN D CAREY MD
HENRY FORD HOSP
DETROIT MI 48202

JOHN C CARLISLE MD
15101 SOUTHFIELD
ALLEN PARK MI 48101

HAROLD W CARLSON MD L
18070 WILDEMERE AVE
DETROIT MI 48221

KENNETH W CARMAN MD
30928 FORD RD
GARDEN CITY MI 48135

JOS CARP MD
8717 VAN DYKE
DETROIT MI 48213

C J CARPENTER MD L
P O BOX 249
WAYNE MI 48184

WM S CARPENTER MD
1750 HAMMOND CT
BLOOMFIELD MI 48013

CARLOS CARRASQUILLA MD
VETERANS HOSPITAL
ALLEN PARK MI 48101

LEE CARRICK MD
18050 MACK AVE
GROSSE PTE MI 48236

ELMER H CARROLL MD L
16734 GREENVIEW
DETROIT MI 48219

JEROME G CARROLL MD
29588 FIVE MILE RD
LIVONIA MI 48154

LONA B CARROLL MD L
938 DAVID WHITNEY BLDG
DETROIT MI 48226

HERMAN J CARSON MD
19149 SEVEN MILE RD
DETROIT MI 48219

HENRY R CARSTENS MD L
628 S FOX HILLS DR 103
BLOOMFIELD HILLS MI 48013

ANNE C CARTER MD A
HENRY FORD HOSPITAL
DETROIT MI 48202

JAMES A U CARTER MD
19271 STRATHCONA DR
DETROIT MI 48203

LELAND F CARTER MD L
114 HANDY RD
GROSSE PTE MI 48236

MIGUEL A CASAS MD
9613 E OUTER DR
DETROIT MI 48213

PHILIP N CASCADE MD
SINAI HOSPITAL
DETROIT MI 48235

HILDA B CASE MD
22670 MADISON DR
ST CLAIR SHORES MI 48081

EMANUEL R CASENAS MD
29226 ORCHARD LAKE RD
FARMINGTON MI 48024

MORTON B CASH MD
33155 ANNAPOLIS
WAYNE MI 48184

RALPH CASH MD
15705 W TEN MILE RD
SOUTHFIELD MI 48075

TOM J CASPERSON MD A
IRWIN ARMY HOSP
FT RILEY KANSAS 66442

HARRY E CASSEL M D
6742 PARK AVE
ALLEN PARK MI 48101

VICENTE T CASTILLO MD
3901 BEAUBIEN
DETROIT MI 48201

MAURICE E CASTLE MD
20211 GREENFIELD
DETROIT MI 48235

JOSEPH V CATALANO MD
20905 GREENFIELD
SOUTHFIELD MI 48075

GREGORIO R CATURAY MD
NO DETROIT GEN HOSP
3105 CARPENTER

DETROIT MI 48212

ANDREW F CAUGHEY JR MD
15256 LEVAN RD
LIVONIA MI 48154

FRED E CAUMARTIN MD
17184 WILDEMERE
DETROIT MI 48221

ANIBAL CAZAL MD
911 DAVID WHITNEY BLDG
DETROIT MI 48226

FRANK A CELLAR JR MD
26789 WOODWARD AVE
HUNTINGTON WOODS MI 48070

ALBERT J CERAVOLO MD
468 CADIEUX RD
DETROIT MI 48230

ANTHONY R CERESKO MD
1060 W FORT
DETROIT MI 48226

EUGENE J CETNAR MD
4322 BISHOP
DETROIT MI 48224

MANSUK CHAE MD
W OUTER DR HOSPITAL
LINCOLN PARK MI 48146

NED I CHALAT MD
929 FISHER BLDG
DETROIT MI 48202

HENRY G CHALL MD L
2941 W MC NICHOLS RD
DETROIT MI 48221

NORA CHANG MD
CHILDRENS HOSPITAL
DETROIT MI 48202

SIDNEY E CHAPIN MD
125 N MILITARY
DEARBORN MI 48124

AARON L CHAPMAN M D L
406 W FRISCO RD
PENSACOLA FL 32507

E FORREST CHAPMAN MD
36825 BIBBINS
ROMULUS MI 48174

PAUL T CHAPMAN MD
1151 TAYLOR AVE
DETROIT MI 48202

ROLAND H CHAPMAN MD
3790 WOODWARD AVE
DETROIT MI 48201

HENRY A CHAPNICK MD
29636 MIDDLEBELT #1064
FARMINGTON MI 48024

BARBARA M CHAPPER MD
861 MONROE
DEARBORN MI 48124

MARTIN L CHARLES MD
1050 FISHER BLDG
DETROIT MI 48202

ARNOLD D CHARNLEY MD
1678 MERRIMAN RD
WAYNE MI 48184

SIDNEY CHARNAS MD
15901 W NINE MILE RD
SOUTHFIELD MI 48075

CLYDE H CHASE MD R
2922 DAWES ST SE
GRAND RAPIDS MI 49508

JACOB L CHASON MD
1401 RIVARD ST
DETROIT MI 48207

LUIS A CHAVEZ MD
690 MULLETT ST
DETROIT MI 48226

WILLIAM M CHAVIS MD
13800 LIVERNOIS
DETROIT MI 48238

FRANK E CHECK MD
76 W ADAMS AVE
DETROIT MI 48226

ALLEN S Y CHEN MD
11933 BELLEVILLE RD
BELLEVILLE MI 48111

CALVIN H CHEN MD
STATE HOSP
NORTHVILLE MI 48167

YOU CHEN CHEN MD
CHILDREN S HOSPITAL
DETROIT MI 48202

SHEK C CHEN MD
1326 ST ANTOINE
DETROIT MI 48226

VINCENT V CHEN MD
1800 TUXEDO
DETROIT MI 48206

B J CHERENZIA MD
7437 WELLBOURNE CT
BIRMINGHAM MI 48010

ALICE CHESTER M D
25085 COOLIDGE HWY
OAK PARK MI 48237

WM P CHESTER MD
3800 WOODWARD RM 802
DETROIT MI 48201

GEO M CHILDS MD L
1059 FISHER BLDG
DETROIT MI 48202

ADOLFO M CHIPOCO MD
950 E STATE FAIR RD
DETROIT MI 48203

YOON HA CHO MD
1400 CHRYSLER EXPWY
DETROIT MI 48207

BERNARD CHODORKOFF MD
19435 SHREWSBURY
DETROIT MI 48221

ABDUL S CHOUDHRY MD
17533 FORT ST
RIVERVIEW MI 48192

MARION C CHOWN MD
2025 FORD
WYANDOTTE MI 48192

R C CHRISTENSEN MD
20861 MACK AVE
GROSSE PTE WOODS MI 48236

JAMES G CHRISTOPHER MD A
20295 DOUGLAS CT
BIRMINGHAM MI 48010

LAURENCE A CHROUCH MD L

PLEASANT HILL TN 38578

ALOYSIUS S CHURCH MD A
19570 BRETTON DR
DETROIT MI 48223

MARIO S CIOFFARI MD
21819 W 9 MILE RD
SOUTHFIELD MI 48075

MUIR CLAPPER MD
1401 RIVARD ST
DETROIT MI 48207

ARTHUR M CLARK MD
22371 NEWMAN
DEARBORN MI 48124

CHARLES E CLARK 111 MD A
WAYNE STATE UNIV
SCHOOL OF MEDICINE

DETROIT MI 48207

MAX D CLARK MD
2799 W GRAND BLVD
DETROIT MI 48202

WM P CLARK MD
1808 BALDWIN
ANN ARBOR MI 48104

NORMAN E CLARKE MD L
21950 GREENFIELD
DETROIT MI 48237

NORMAN E CLARKE JR MD
21950 GREENFIELD
DETROIT MI 48237

ROBT B CLARKE MD
76 W ADAMS AVE
DETROIT MI 48226

RAYMOND R CLEMENS MD
23843 JOY
DEARBORN MI 48127

VOLNA CLERMONT MD
5050 JOY RD
DETROIT MI 48204

JOHN E CLIFFORD MD
18348 MACK
DETROIT MI 48236

ANDREW R W CLIMIE MD
HARPER HOSPITAL
DETROIT MI 48201

JOHN P CLUNE MD
414 DAVID WHITNEY BLDG
DETROIT MI 48226

E OSBORNE COATES JR MD
HENRY FORD HOSP
DETROIT MI 48202

JOHN H COBANE MD L
151 MERRIWEATHER
DETROIT MI 48236

TULLIO L COCCIA MD
20211 GREENFIELD
DETROIT MI 48235

EDGAR G COCHRANE MD L
503 MED ARTS BLDG
DETROIT MI 48203

DAVID M COHEN MD A
US NAVAL HOSPITAL
BEAUFORD S C 29902

HERBERT H COHEN MD
23077 ADVANCE BLDG
SOUTHFIELD MI 48075

S LEONARD COHN MD
28505 SOUTHFIELD RD
LATHRUP VILLAGE MI 48075

DON A COHOE MD L
18916 WOODWARD AVE
DETROIT MI 48203

WYMAN C C COLE MD L
1116 LEISURE LN #3
WALNUT CREEK CA 94529

WYMAN C C COLE JR MD
23843 JOY ROAD
DEARBORN HGTS MI 48127

WM G COLEMAN MD L
P O BOX 4766
DETROIT MI 48219

THOMAS B COLES JR MD
GRACE HOSPITAL
DETROIT MI 48235

JAMES E COLLINS MD
13103 W CHICAGO BLVD
DETROIT MI 48228

JAMES W COLLINS MD
13800 LIVERNOIS
DETROIT MI 48238

JAY L COLLINS MD
HENRY FORD HOSP
DETROIT MI 48202

LESLIE T COLVIN MD R
15015 GLASTONBURY RD
DETROIT MI 48223

RAYMOND G COLYER MD R
284 PILGRIM
BIRMINGHAM MI 48009

JULIUS V COMBS MD
2424 PURITAN
DETROIT MI 48238

LAWRENCE A COMSTOCK MD
3700 WEST RD
TRENTON MI 48183

EMMA J CONKLIN MD
WAYNE CO GEN HOSP
ELOISE MI 48132

LOWRY C M CONLEY MD L
99 TUXEDO AVE
DETROIT MI 48203

RICHARD C CONNELLY MD L
1360 THREE MILE DR
GROSSE PTE MI 48236

PAUL J CONNOLLY MD
3800 WOODWARD AVE
DETROIT MI 48201

PHYLLIS M CONNOR MD
6500 LODGE EXPWY
GOLD KEY INN

DETROIT MI 48202

JOHN J CONNORS MD L
25657 SOUTHFIELD RD
SOUTHFIELD MI 48075

BASIL CONSIDINE JR MD
HARPER HOSPITAL
DETROIT MI 48201

CARLA A COOK MD
HENRY FORD HOSP
DETROIT MI 48202

JAMES A COOK MD
1815 NORTHLINE
WYANDOTTE MI 48192

JAMES C COOK MD
3825 BRUSH ST
DETROIT MI 48201

FRANK COOKINHAM MD
999 S HIGHLAND
DEARBORN MI 48124

WARREN B COOKSEY MD L
3535 W 13 MILE RD
ROYAL OAK MI 48072

JAMES B COOPER MD
18150 MACK AVE
GROSSE PTE MI 48236

RALPH R COOPER MD
1515 DAV WHITNEY BLDG
DETROIT MI 48226

RICHARD F COOPER MD
18100 SHADBROOK DR
NORTHVILLE MI 48167

THOMAS M COOPER MD
8445 E JEFFERSON AVE
DETROIT MI 48214

CATHERINE CORBEILLE MD L
700 SEWARD
DETROIT MI 48202

DAVID P CORBETT MD
HARPER HOSPITAL
DETROIT MI 48201

GILBERT E CORRIGAN MD
400 E LAFAYETTE
DETROIT MI 48226

JOSEPH A CORTEZ MD
19350 W MC NICHOLS
DETROIT MI 48219

STEPHEN D COSTELLO MD
9435 ISLAND DR
GROSSE ILE MI 48138

JOHN F COTANT MD
15901 W 9 MILE RD #420
SOUTHFIELD MI 48075

MARIO COTE MD
13700 WOODWARD #800
DETROIT MI 48203

MOISES G COTO MD
26314 HARRIET DR
DEARBORN HEIGHTS MI 48127

CHAS J COURVILLE MD
703 NORTHLAND MED BLD
SOUTHFIELD MI 48075

CHARLES M COWAN MD
1400 CHRYSLER EXPWY
DETROIT MI 48207

LEON B COWEN MD L
10225 N BALBOA DR
SUN CITY AZ 85351

ROBT L COWEN MD L
962 FISHER BLDG
DETROIT MI 48202

DOUGLAS E COX MD
2355 MONROE
DEARBORN MI 48124

FRANK COX JR M D
HENRY FORD HOSP
DETROIT MI 48202

JAMES E COYLE MD
17770 MACK AVE
GROSSE PTE MI 48224

ROY D CRAIG MD
3790 WOODWARD AVE
DETROIT MI 48201

ROY E CRAIG MD
74 FONTANA LANE
GROSSE PTE SHORES MI 48236

PHILIP G CRAMER MD
WAYNE CO HLTH DEPT
ELOISE MI 48132

EUGENE H CRAWLEY MD
1160 KENSINGTON RD
GROSSE PTE PARK MI 48230

E E J CROCKETT MD
1327 NICOLET
DETROIT MI 48207

LEO J CROLL MD
12703 W 7 MILE RD
DETROIT MI 48235

MAURICE CROLL MD
12703 W SEVEN MILE RD
DETROIT MI 48235

HAROLD E CROSS MD
68 N DEEPLAND RD
GROSSE PTE MI 48236

ROBERT J CROSSEN MD
20867 MACK AVE
GROSSE PTE WOODS MI 48236

JAMES E CROUSHORE MD L
561 NE GOLDEN HARBOUR
BOCA RATON FL 33432

CARLITO V CRUZ MD
20867 MACK AVE
GROSSE PTE WOODS MI 48236

VICTOR M CRUZ MD
15901 W 9 MILE RD #303
SOUTHFIELD MI 48075

MARIA V CSERHALMI MD
1302 BEACONSFIELD
DETROIT MI 48230

ROBT B CUBBERLEY MD
1800 TUXEDO ST
DETROIT MI 48206

FRANK CULLIS MD
261 MACK BLVD
DETROIT MI 48201

ROBERT P CURHAN MD
18709 MEYERS RD
DETROIT MI 48235

FRANK E CURTIS MD L
273 KENWOOD CT
DETROIT MI 48236

WM P CURTISS MD
22631 MACK AVE
ST CLAIR SHORES MI 48080

FREDERICK R CUSHING MD
22101 MOROSS RD
DETROIT MI 48236

PAUL L CUSICK MD
15901 W 9 MILE RD #400
SOUTHFIELD MI 48075

GERALD A CYROWSKI MD
15901 W 9 MILE RD
SOUTHFIELD MI 48075

F M DAIGNAULT MD
20905 GREENFIELD
SOUTHFIELD MI 48075

HAROLD J DAITCH MD
22341 W EIGHT MILE RD
DETROIT MI 48219

MARTIN H DAITCH MD
15244 MIDDLEBELT RD
LIVONIA MI 48154

ESTHER H DALE MD L
4811 JOHN R ST
DETROIT MI 48201

MARK DALE MD
3702 E 8 MILE RD
DETROIT MI 48234

G DAL SANTO MD
1401 RIVARD ST
DETROIT MI 48207

EUGENE T DALY MD
24781 FENKELL
DETROIT MI 48223

SEGUNDO C DANAO MD
36616 PLYMOUTH RD
LIVONIA MI 48150

JAMES C DANFORTH JR MD
20175 MACK AVE
GROSSE PTE WOODS MI 48236

ROBT D DANFORTH MD
20175 MACK AVE
GROSSE PTE WOODS MI 48236

JOHN J DANIELSKI MD
35478 PARKDALE
LIVONIA MI 48150

DAVID A DANLEY MD
MT CARMEL MERCY HOSP
DETROIT MI 48235

BRUCE L DANTO MD
466 FISHER BLDG
DETROIT MI 48202

GEORGE W DANZ MD
1539 FORD
WYANDOTTE MI 48192

PATRICK H DAOUST MD
15520 GARFIELD
ALLEN PARK MI 48101

JOHN J DARIN MD A
DETROIT GENERAL HOSP
DETROIT MI 48226

CHAS E DARLING MD
673 FISHER BLDG
DETROIT MI 48202

HARRY O DAVIDSON MD L
2799 W GRAND BLVD
DETROIT MI 48202

WINDSOR S DAVIES MD
28 W ADAMS AVE
DETROIT MI 48226

JEROME D DAVIS MD
29927 W SIX MILE
LIVONIA MI 48152

WM N DAVIS MD
125 N MILITARY
DEARBORN MI 48124

W A DAWSON MD R
188 LAKE SILVER DR NW
WINTER HAVEN FL 33880

A JACKSON DAY MD
3800 WOODWARD AVE #406
DETROIT MI 48201

FRANCIS T DAY MD
18540 MACK
DETROIT MI 48236

JAY C DAY MD
1016 PROF PLAZA
DETROIT MI 48201

JORGE H DAY MD N
1787 NEWCASTLE
GROSSE PTE WOODS MI 48236

RUTH S DAY MD
3790 WOODWARD AVE
DETROIT MI 48201

VEHBI DAYIOGLU MD
27560 CHERRY HILL
GARDEN CITY MI 48135

ELIODORO DE AENLLE MD
29022 MERRICK
WARREN MI 48092

GEORGE A DEAN MD
18900 W TEN MILE RD
SOUTHFIELD MI 48075

ROGER W DE BUSK MD
4160 JOHN R ST
DETROIT MI 48201

ROBT J DEERING MD
1359 CHAMPAIGN
LINCOLN PARK MI 48146

ALBERT F DE GROAT MD L
31296 PICKWICK SOUTH
BIRMINGHAM MI 48009

GLORIA K DE GUZMAN MD
754 FISHER BLDG
DETROIT MI 48202

DANIEL DEITCH MD
KIRWOOD GENERAL HOSP
DETROIT MI 48238

EDWIN DE JONGH MD
GEN MOTORS BUILDING
DETROIT MI 48202

STELLA M DELAINI MD
3011 W GRAND BLVD
DETROIT MI 48202

BETTY J DE LAWRENCE MD
21576 MICHIGAN AVE
DEARBORN MI 48124

THOMAS DE LAWRENCE MD
21576 MICHIGAN AVE
DEARBORN MI 48124

THOS E DEL GIORNO MD A
MECOSTA MI 49332

P A DELGIUDICE MD
GRACE HOSPITAL
DETROIT MI 48201

C C DEL-ROSARIO MD
22231 W OUTER DR
DEARBORN MI 48124

FRANCISCO DEL VALLE MD
3729 FORT ST
LINCOLN PARK MI 48146

MARIO DEL VALLE MD
5826 ANDOVER
TROY MI 48084

ALPHONSE R DERESZ MD
4204 E OUTER DR
DETROIT MI 48234

PAUL E DERLETH MD
563 W OAKRIDGE AVE
FERNDALE MI 48220

C F DERRICK MD
3677 FORT STREET
LINCOLN PARK MI 48146

GEO C DE SMYTER MD
15527 E WARREN
DETROIT MI 48224

YVON J DES ROBERTS MD
18430 MACK AVE
DETROIT MI 48236

OWEN J DEUBY MD
15121 W SEVEN MILE RD
DETROIT MI 48235

DOUGLAS A DEVENS MD
DETROIT GENERAL HOSP
DETROIT MI 48226

HERBERT W DEVINE MD
22101 MOROSS RD
DETROIT MI 48236

LILIAN M DIAKOW MD
1539 N LINE RD
WYANDOTTE MI 48192

GEORGE DIAZ MD A
LAFAYETTE CLINIC
DETROIT MI 48207

G J DIAZDELCASTILLO MD A
WAYNE STATE UNIV
DETROIT MI 48207

ROBERT C DICKENMAN MD
DETROIT MEMORIAL HOSP
DETROIT MI 48226

BASIL R DICKSON MD L
337 W GRAND BLVD
DETROIT MI 48216

EFRAIN O DICKSON MD
4021 HARDSWOOD DR
ORCHARD LAKE MI 48033

ELIAS L DICKSON JR MD
17320 LIVERNOIS
DETROIT MI 48221

LEON A DICKSON MD
18200 WYOMING
DETROIT MI 48221

MARY D DICKSON MD
18424 MACK AVE
GROSSE PTE FARMS MI 48236

NELSON W DIEBEL MD
660 CADIEUX RD
DETROIT MI 48230

FRED C DIEKMAN MD
31815 SOUTHFIELD RD
BIRMINGHAM MI 48009

MARGARET R DIETZE MD
861 MONROE
DEARBORN MI 48124

LEONARD L DI LELLA MD
12811 NORTHLINE RD
SOUTHGATE MI 48195

HUGH L DILL MD L
365 MARY ST
GROSSE PTE FARMS MI 48236

J LEWIS DILL MD L
1070 S W TAMARIND WAY
BOCA RATON FL 33432

PANFILO C DI LORETO MD
285 VINCENNES PL
DETROIT MI 48236

GENNARO J DI MASO M D
20963 KELLY
EAST DETROIT MI 48021

GEO E DIMOND MD
18401 BRETTON DR
DETROIT MI 48223

JUAN C DIMUSTO MD
1554 TUXEDO
DETROIT MI 48206

RANIERO DIPIERO MD
1800 TUXEDO
DETROIT MI 48206

DONALD M DITMARS JR MD
HENRY FORD HOSPITAL
DETROIT MI 48202

EDWIN F DITTMER MD
18342 MACK AVENUE
DETROIT MI 48236

FREDK W DIXON MD
245 S MARTHA
DEARBORN MI 48124

ANGEL G DIZON MD
18424 W MCNICHOLS RD
DETROIT MI 48219

S DJURASKOVIC MD A
WAYNE STATE UNIV
DETROIT MI 48207

CLIFFORD L DOANE MD
15041 E 7 MILE RD
DETROIT MI 48205

JOHN C DODDS MD L
18520 W 7 MILE RD
DETROIT MI 48219

CHAS F DODENHOFF MD
18031 KELLY RD
DETROIT MI 48224

FOREST D DODRILL MD
WOODBERRY DR
BLOOMFIELD HILLS MI 48013

WENDELL R DOERING MD
18211 W 12 MILE RD
LATHRUP VILLAGE MI 48075

EDWARD A DOLAN MD
1960 S HAMMOND LAKE DR
PONTIAC MI 48053

STANLEY F DOLEGA MD
15640 E WARREN AVE
DETROIT MI 48224

SIDNEY DOLGOFF MD
15600 MICHIGAN AVE
DEARBORN MI 48126

SIMON DOLIN MD
28500 BELL RD
SOUTHFIELD MI 48075

HENRY M DOMZALSKI MD
15252 GRATIOT AVE
DETROIT MI 48205

ROLF W DONATH MD
719 NEW CENTER BLDG
DETROIT MI 48202

EUGENE T DONOVAN MD
13349 MICHIGAN AVE
DEARBORN MI 48126

RICHARD S DONOVAN MD
18211 W 12 MILE RD
LATHRUP VILLAGE MI 48075

ALFREDO J DO PICO MD
P O BOX 308
GARDEN CITY MI 48135

JOHN H DORAN MD
23871 W MCNICHOLS
DETROIT MI 48219

JACK DORMAN MD
21701 W 11 MILE RD
SOUTHFIELD MI 48075

M G DOROSTKAR MD
45101 HARMONY
BELLEVILLE MI 48111

EDWARD C DORSEY MD
86 KERBY RD
GROSSE PTE FARMS MI 48236

JOHN M DORSEY MD L
756 MACKENZIE HALL WSU
DETROIT MI 48202

BHOGILAL C DOSHI MD
10448 LINCOLN
TAYLOR MI 48180

WILLIAM L DOSS MD
10145 E JEFFERSON
DETROIT MI 48214

CHESTER A DOTY MD L
12210 ST ANNES DR
SUN CITY ARIZ 85351

HOWARD P DOUB MD L
2799 W GRAND BLVD
DETROIT MI 48202

EDW A DOUGHERTY JR MD
18241 W MC NICHOLS RD
DETROIT MI 48219

CLAIR L DOUGLAS MD L
1201 RICHMOND ST #807
LONDON ONT CANADA

ROBT C DOUGLASS MD
23023 ORCHARD LAKE RD
FARMINGTON MI 48024

BENJ W DOVITZ MD
16820 GREENFIELD AVE
DETROIT MI 48235

IRA G DOWNER MD L
8445 E JEFFERSON AVE
DETROIT MI 48214

GEO O DOWNES MD
15062 HOUSTON
DETROIT MI 48205

ELLET H DRAKE MD
HENRY FORD HOSP
DETROIT MI 48202

RUTH L DRAPIZA MD
13400 FORT ST
SOUTHGATE MI 48195

EDWARD F DRAVES MD A
19647 JOY RD
DETROIT MI 48228

JOEL DREYER MD
15800 W MCNICHOLS RD
DETROIT MI 48235

BEN DROBLAS MD
8233 W CHICAGO
DETROIT MI 48204

Z J F DROZDOWSKA MD
240 CHESTERFIELD RD
BLOOMFIELD HILLS MI 48013

BRUCE H DRUKKER MD
HENRY FORD HOSPITAL
DETROIT MI 48202

JOHN K DRUMM MD
1420 ST ANTOINE ST
DETROIT MI 48226

DOROTHY D SENA MD
33000 PALMER RD
WAYNE MI 48184

MARTIN S DUBPERNELL MD L
4019 GILBERT ST
DETROIT MI 48210

ROBT O DUBPERNELL MD
18595 GRAND RIVER
DETROIT MI 48223

JOHN J DUDEK JR MD
19244 GRAND RIVER
DETROIT MI 48223

JOHN J DUDEK MD
19244 GRAND RIVER
DETROIT MI 48223

PAUL R DUMKE MD
2799 W GRAND BLVD
DETROIT MI 48202

JAMES R DUNCAN MD
5050 JOY RD
DETROIT MI 48204

HENRY A DUNLAP MD
7815 JEFFERSON AVE E
DETROIT MI 48214

CORNELIUS E DUNN MD L
327 VILLA LANE
ST CLAIR SHORES MI 48080

JOHN S DUNN MD A
4063 18TH ST N W
ROCHESTER MINN 55901

GERALD E DUPLER MD
24234 MICHIGAN AVE
DEARBORN MI 48124

FRANK S DUPONT MD
DETROIT MEMORIAL HOSP
DETROIT MI 48226

EVERETT W DURHAM MD
18101 OAKWOOD BLVD
DEARBORN MI 48124

ROBT DURHAM MD L
HENRY FORD HOSP
DETROIT MI 48202

DWIGHT J DUTCHER MD
711 S OXFORD
DETROIT MI 48236

FRANK A DUWE MD
25321 FIVE MILE RD
DETROIT MI 48239

PAUL J DWAIHY MD A
14530 E WARREN
DETROIT MI 48215

FRANCIS W DWYER MD A
15901 W 9 MILE RD #314
SOUTHFIELD MI 48075

ROSEMARY M DYKEMA MD
18424 MACK AVE
DETROIT MI 48236

JOHN F DZIUBA MD
18901 W WARREN AVE
DETROIT MI 48228

PAUL DZUL MD
17800 E 8 MILE RD
DETROIT MI 48236

CHAS C EADES MD R
NO 60 TREASURE ISLAND
LAGUNA BEACH CA 92651

ROBT L EASTERLY MD
1404 FORD AVENUE
WYANDOTTE MI 48192

RAYMOND J ECHT MD
VA HOSPITAL
ALLEN PARK MI 48101

ARTHUR W ECKHOUS MD
1015 KALES BLDG
DETROIT MI 48226

DONALD E ECONOMY MD
18 W LANE CT
DEARBORN MI 48124

SAML J EDER MD L
19800 W 12 MILE RD
SOUTHFIELD MI 48075

IRVING I EDGAR MD
1036 DAV WHITNEY BLDG
DETROIT MI 48226

WM N EDMONDS MD L
18525 MERRIMAN RD
LIVONIA MI 48152

ROBT B EDMONDSON MD
18501 MACK AVE
DETROIT MI 48236

C RUPERT L EDWARDS MD
3800 WOODWARD AVE #318
DETROIT MI 48201

JAMES G EDWARDS MD
17751 E WARREN AVE
DETROIT MI 48224

CHARLES F EGAN MD
WYANDOTTE GEN HOSP
WYANDOTTE MI 48192

A B EISENBREY MD
1026 FISHER BLDG
DETROIT MI 48202

B EISENSTEIN MD
459 FISHER BLDG
DETROIT MI 48202

EDWARD F ELDREDGE MD
18540 MACK AVE
GROSSE PTE MI 48236

JEAN C ELIE MD
938 DAV WHITNEY BLDG
DETROIT MI 48226

JOS P ELLIOTT JR MD
HENRY FORD HOSP
DETROIT MI 48202

FRANK R ELLIS MD
800 S LAFAYETTE
DEARBORN MI 48124

LEONARD E ELLISON MD
3800 WOODWARD AVE
DETROIT MI 48201

MEYER J ELMAN MD
108 W HANCOCK
DETROIT MI 48201

ABRAHAM L ELSON MD
28200 SOUTHFIELD
LATHRUP VILLAGE MI 48075

ROBT J ELVIDGE MD L
2900 W GRAND BLVD
DETROIT MI 48202

JOHN EMANUELSEN MD
14930 GRANDVILLE
DETROIT MI 48223

HERMAN C EMMERT MD L
4927 N 34TH
ARLINGTON VA 22207

GERHARD C ENDLER MD
1413 BLAIRMOOR CT
GROSSE PTE WOODS MI 48236

HENRI L ENFROY MD
7421 W 7 MILE RD
DETROIT MI 48221

EARL H ENGEL MD L
33 EMMONS COURT
WYANDOTTE MI 48192

FREDK W ENGSTROM MD
2021 MONROE
DEARBORN MI 48124

RUBY M ENGSTROM MD
1777 CULVER AVE
DEARBORN MI 48124

LAUREL S ENO MD
212 EASTLAND PR BLDG
DETROIT MI 48236

DWIGHT C ENSIGN MD L
HENRY FORD HOSP
DETROIT MI 48202

WILLIAM R EPPLER MD
20160 MACK AVE
DETROIT MI 48236

BURTON S EPSTEIN MD
18215 GREENFIELD
DETROIT MI 48235

ELDON W ERICKSON MD
25750 W OUTER DR
LINCOLN PARK MI 48146

MILES A ERICKSON MD
12285 TELEGRAPH
TAYLOR MI 48180

JOS M ERMAN MD L
19530 STRATFORD RD
DETROIT MI 48221

SAIT D ERMETE MD
1624 MERRIMAN
WESTLAND MI 48185

REGINALD H ERNST MD
5050 JOY RD
DETROIT MI 48204

JOS W ESCHBACH MD L
935 S MILITARY ST
DEARBORN MI 48124

ELVIRA ESPIRITU MD
2200 E GRAND BLVD
DETROIT MI 48211

ROGELIO F ESPIRITU MD
4059 W DAVISON
DETROIT MI 48238

FRANK J EURS MD
20485 MACK AVE
GROSSE PTE WOODS MI 48236

GEORGE C EVANS MD
4059 W DAVISON
DETROIT MI 48238

GOMER P EVANS JR MD
1553 WOODWARD AVE
DETROIT MI 48226

JOS M EVANS MD
16431 HARPER
DETROIT MI 48224

TOMMY N EVANS MD
18630 FAIRWAY DR
DETROIT MI 48221

CHAS H EWING MD L
17120 E WARREN
DETROIT MI 48224

WM R EYLER MD
2799 W GRAND BLVD
DETROIT MI 48202

ALFRED E EYRES MD
17800 E 8 MILE
DETROIT MI 48236

HAROLD L FACHNIE MD
17401 GREENFIELD RD
DETROIT MI 48235

SEBASTIAN J FAELLO MD
16840 E WARREN AVE
DETROIT MI 48224

IRVING D FAGIN MD
18254 LIVERNOIS AVE
DETROIT MI 48221

RAMFIS B FAHIM MD
14634 E 7 MILE RD
DETROIT MI 48205

A C FAJARDO MD
OAKWOOD HOSP
DEARBORN MI 48124

MORDECAI L FALICK MD
189 TOWNSEND
BIRMINGHAM MI 48011

IRA E FALK MD
23300 PROVIDENCE DR
SOUTHFIELD MI 48075

LAWRENCE S FALLIS MD L
2799 W GRAND BLVD
DETROIT MI 48202

THEODORE S FANDRICH MD R
200 MIRAMAR AVE
MONTECITO CA 93103

LUIS R FANEGO MD
4496 LARME
ALLEN PARK MI 48101

AARON A FARBMAN MD
14515 KERCHEVAL
DETROIT MI 48215

ANGEL M FARINA MD
2020 MIDDLEBELT
GARDEN CITY MI 48135

SHERMAN P FAUNCE MD
1824 SEMINOLE ST
DETROIT MI 48214

JOHN F FEA MD
MT CARMEL MERCY HOSP
DETROIT MI 48235

MAUREEN S FEDESON MD
MT CARMEL MERCY HOSP
DETROIT MI 48235

THEODORE M FEDESON MD
MT CARMEL MERCY HOSP
DETROIT MI 48235

DAVID FELD MD
15101 W MC NICHOLS RD
DETROIT MI 48235

LEE E FELDKAMP MD
360 N MAIN
PLYMOUTH MI 48170

IRWIN FELDMAN MD
37380 GLENWOOD
WAYNE MI 48184

NATHANIAL L FELDMAN MD A
964 CERES RD
PALM SPRINGS CA 92262

PAUL H FELDMAN MD
16800 GREENFIELD
DETROIT MI 48235

MARTIN Z FELDSTEIN MD L
16500 NO PARK DR #420
SOUTHFIELD MI 48075

WM A FELLNER MD
3 202 GEN MOTORS BLDG
DETROIT MI 48202

WILLIAM R FELLOWS MD
3815 PELHAM
DEARBORN MI 48124

HAROLD B FENECH MD L
3800 WOODWARD AVE
DETROIT MI 48201

WM G FENNER MD
12454 E OUTER DR
DETROIT MI 48224

JOHN F FENNESSEY MD
512 RIVARD
GROSSE PTE MI 48236

MERYL M FENTON MD
15901 W 9 MILE RD
SOUTHFIELD MI 48075

RUSSELL F FENTON MD L
18469 HILLCREST BLVD
BIRMINGHAM MI 48009

STUART V FENTON MD
23300 GREENFIELD
OAK PARK MI 48237

VANCE FENTRESS MD
308 PROFESSIONAL PLAZA
DETROIT MI 48201

PHILIP J FERINGA MD
20840 VERNIER
HARPER WOODS MI 48236

RICHARD J FERRARA MD
20045 MACK AVE
GROSSE PTE WOODS MI 48236

VIRGINIA M FERRARA MD
18422 WOODWARD
DETROIT MI 48203

FELICIANO FERRER MD
27634 FIVE MILE
LIVONIA MI 48154

GEORGE N FERRIS M D
20001 GREENFIELD
DETROIT MI 48235

MARION S FERSZT MD
15369 GRANDVILLE
DETROIT MI 48223

LEO S FIGIEL MD
1500 BALMORAL RD
DETROIT MI 48203

STEVEN J FIGIEL MD
4160 JOHN R ST
DETROIT MI 48201

LAWRENCE E FILKIN MD
15645 NORTHVILLE
FOREST DR APT 193

PLYMOUTH MI 48170

LEON FILL MD
2310 CASS EXEC SUITE
DETROIT MI 48201

F SINCLAIR FINCH MD
894 N RENAUD
DETROIT MI 48236

JEROME H FINCK MD
25841 PLYMOUTH
DETROIT MI 48239

EDWARD FINE MD
15901 W 9 MILE RD
SOUTHFIELD MI 48075

GERALD FINE MD
HENRY FORD HOSP
DETROIT MI 48202

SAML FINK MD
10161 BURTON
OAK PARK MI 48237

I S FINKELSTEIN MD
20905 GREENFIELD #102
SOUTHFIELD MI 48075

M B FINKELSTEIN MD
18254 LIVERNOIS
DETROIT MI 48221

PAUL G FIRNSCHILD M D
8 SHADY HOLLOW
DEARBORN MI 48124

ARTHUR J FISCHER MD
15370 LEVAN RD
LIVONIA MI 48154

FREDK J FISCHER MD L
654 FISHER BLDG
DETROIT MI 48202

HERBERT L FISHBEIN MD
987 E JEFFERSON AVE
DETROIT MI 48207

GEO S FISHER MD
1709 DAV WHITNEY BLDG
DETROIT MI 48226

JAMES M FISHER MD
176 MERRIWEATHER
GROSSE PTE MI 48236

STUART FISHER MD A
DETROIT GENERAL HOSP
DETROIT MI 48226

C H FITZGERALD MD DIR
234 STATE ST
WAYNE CO MENTAL
HEALTH CLINIC
DETROIT MI 48226

F W FITZPATRICK MD
17187 SCHAEFER
DETROIT MI 48235

NORMAN W FLAHERTY MD
24315 FAIRMONT DR
DEARBORN MI 48124

THOMAS M FLAKE MD
13800 LIVERNOIS AVE
DETROIT MI 48238

L E FLEISCHMANN MD
CHILDRENS HOSPITAL
DETROIT MI 48202

WM R FLORA MD
17800 E EIGHT MILE RD
DETROIT MI 48236

BETTY S FLORES MD
1449 DAV WHITNEY BLDG
DETROIT MI 48226

WILLIAM S FLOYD MD
28505 SOUTHFIELD RD
LATHRUP VILLAGE MI 48075

MARIE N FLY MD
OAKWOOD HOSPITAL
DEARBORN MI 48124

ROBT G FOGT MD
316 NEFF ROAD
GROSSE POINTE MI 48230

HUGH S FOLEY MD L
22707 ALEXANDRINE
DEARBORN MI 48124

JOHN A FOOTE MD
1336 SOUTHFIELD RD
LINCOLN PARK MI 48146

FRANK S FORDELL MD R
22159 W OUTER DR
DEARBORN MI 48124

GORDON R FORRER MD
905 PENNIMAN
PLYMOUTH MI 48170

ROBERT P FOSNAUGH M D
23185 TIMBERLINE
SOUTHFIELD MI 48075

E BRUCE FOSTER MD
20905 GREENFIELD RD
SOUTHFIELD MI 48075

OWEN C FOSTER MD L
167 WORDSWORTH ST
FERNDALE MI 48220

WALLACE M FOSTER MD
13700 WOODWARD AVE
HIGHLAND PARK MI 48203

CHARLES W FOUNTAIN MD
2012 MONROE BLVD
DEARBORN MI 48124

MELVIN E FOWLER MD L
247 E WARREN ST
DETROIT MI 48201

THOMAS A FOX JR MD
HENRY FORD HOSP
DETROIT MI 48202

PAUL L FRAIBERG MD
16240 N PARK DR
SOUTHFIELD MI 48075

BOY FRAME MD
543 LAKEPOINTE
GROSSE PTE PARK MI 48230

CHAS J FRANCE MD
17800 E EIGHT MILE RD
ESTLND PROF BLDG #436

HARPER WOODS MI 48225

MARION J FRANJAC MD R
3 AUBURN DRIVE
LAKE WORTH FL 33460

MAURICE A FRANKEL MD
17000 W EIGHT MILE
SOUTHFIELD MI 48075

JOHN E FRANKLIN MD
4075 INK RD
INKSTER MI 48141

NILS A FRANZEN MD L
15360 OAKFIELD AVE
DETROIT MI 48227

GEO C FREDERICKSON MD
7430 SECOND
DETROIT MI 48202

HARRY W FREE MD
17550 W 12 MILE RD
SOUTHFIELD MI 48075

DONALD K FREEMAN MD
881 CHALMERS ST
DETROIT MI 48215

MICHAEL W FREEMAN MD L
1810 WELLESLEY DR
DETROIT MI 48203

RICHARD F FREEMAN MD
310 VISGER
RIVER ROUGE MI 48218

WILMER FREEMAN MD
940 EAST 7 MILE RD
DETROIT MI 48203

SAMUEL FREID MD
17537 PARKSIDE
DETROIT MI 48221

MORTON L FREIER MD
26440 SOUTHFIELD RD
LATHRUP VILLAGE MI 48037

ANDREW A FREIER MD
18597 W TEN MILE
SOUTHFIELD MI 48075

EUGENE L FREITAS MD
ST JOHNS HOSPITAL
DETROIT MI 48236

ALEX S FRIEDLAENDER MD
15901 W NINE MILE RD
SOUTHFIELD MI 48075

SIDNEY FRIEDLAENDER MD
15901 W NINE MILE RD
SOUTHFIELD MI 48075

JOSEPH FRIEDLANDER MD A

DAVID FRIEDMAN MD
1333 STRATHCONA
DETROIT MI 48203

HYMAN FRIEDMAN MD
6742 PARK AVE
ALLEN PARK MI 48101

ISIDOR H FRIEDMAN MD L
10 PETERBORO
DETROIT MI 48201

SEYMOUR FRIEDMAN MD
7636 ALLEN RD
ALLEN PARK MI 48101

WM G FRIEND MD
3800 WOODWARD AVE #508
DETROIT MI 48201

HAROLD M FROST MD
HENRY FORD HOSP
DETROIT MI 48202

RICHARD G FROST MD
410 HILLCREST AVE
GROSSE PTE FARMS MI 48236

JAMES D FRYFOGLE MD
15901 W 9 MILE RD #715
SOUTHFIELD MI 48075

SHIRO FUJITA MD
HENRY FORD HOSPITAL
DETROIT MI 48202

WILLIAM R FULGENZI MD
1210 KALES BLDG
DETROIT MI 48226

HUGH M FULLER MD
404 DAVID WHITNEY BLDG
DETROIT MI 48226

WM J FULTON MD R
BENNETT PTE RD
QUEENSTOWN MD 21658

CARL A GAGLIARDI MD
3516 FORT ST
LINCOLN PARK MI 48146

RAY D GAINES MD
WAYNE CO GEN HOSP
ELOISE MI 48132

ROBERT J GALACZ MD
19291 WOODSTON RD
DETROIT MI 48203

H C GALANTOWICZ MD L
7433 MICH AVE
DETROIT MI 48210

THOS H GALANTOWICZ MD
23601 FORD RD
DEARBORN MI 48128

LASLO GALDONYI M D L
2311 DAV BRODERICK TWR
DETROIT MI 48226

DARREL B GALERNEAU MD L
964 OAKWOOD DR APT 152
ROCHESTER MI 48063

HENRY GALL M D
10531 FARMINGTON RD
LIVONIA MI 48150

JAMES P GALLAGHER MD
14801 SOUTHFIELD
ALLEN PARK MI 48101

VINCENT J GALLANT MD
1414 WELLESLEY DR
DETROIT MI 48203

RICHARD P GALLUCCI MD
23100 CHERRY HILL
DEARBORN MI 48124

JOHN P GALVIN MD
19959 VERNIER RD
HARPER WOODS MI 48236

S N GANGULY MD
HUTZEL HOSPITAL
DETROIT MI 48201

THOS GANDS MD
6742 PARK AVE
ALLEN PARK MI 48101

ROBERT I GANS MD
26615 GREENFIELD
SOUTHFIELD MI 48075

JOHN H GANSCHOW MD
25034 CHAMPLAIGN
SOUTHFIELD MI 48076

REMIGIO GARCIA MD
HENRY FORD HOSP
DETROIT MI 48202

LAWRENCE W GARDNER MD
18782 GLENWOOD
LATHRUP VILLAGE MI 48076

MAX L GARDNER MD
19557 MACK AVE
GROSSE PTE MI 48236

LOUIS B GARIEPY MD
6116 WING LAKE RD
BIRMINGHAM MI 48010

LOUIS J GARIEPY MD L
16401 GRAND RIVER
DETROIT MI 48227

H HARVEY GASS MD
529 FISHER BLDG
DETROIT MI 48202

HERBERT B GASTON MD
7501 W MORROW CIRCLE
DEARBORN MI 48126

MIGUEL G GATMAITAN MD A
GRACE HOSPITAL
DETROIT MI 48201

ALEX GAYNOR MD
1755 E 7 MILE RD
DETROIT MI 48203

HAROLD W GEHRING MD
3535 W 13 MILE NO 507
ROYAL OAK MI 48072

AUGUST E GEHRKE MD R
850 TRAILWOOD PATH
BIRMINGHAM MI 48010

WM A GEITZ MD R
BOX 1133
BOCA RATON FL 33432

PHILIP D GELBACH MD
22600 KING RICHARD CT
BIRMINGHAM MI 48010

M J GEOGHEGAN MD
3815 PELHAM
DEARBORN MI 48124

ALMA R GEORGE MD
10730 W 7 MILE RD
DETROIT MI 48221

JOHN A GERALT MD
11420 MACK AVE
DETROIT MI 48214

ROBT A GERISCH MD
1217 DAV WHITNEY BLDG
DETROIT MI 48226

ELMOND J GERONDALE MD L
3001 W GRAND BLVD
DETROIT MI 48202

HASSAN GHANDCHI MD
16975 FARMINGTON
LIVONIA MI 48154

BURJOR D GHANDHI MD
19309 GREENFIELD
DETROIT MI 48235

DUNBAR P GIBSON MD
BOX 1256
DETROIT MI 48231

PETER GIBSON MD
CHILDRENS HOSPITAL
DETROIT MI 48202

WM GIBSON MD
3790 WOODWARD AVE
DETROIT MI 48202

FRED W GIESE M D
18526 SCHOOLCRAFT
DETROIT MI 48223

CONRAD L GILES MD
407 NORTHLAND MED BLDG
SOUTHFIELD MI 48075

STEPHEN M GILLESPIE MD
23100 CHERRY HILL
DEARBORN MI 48124

JAMES C GILLIAM JR MD
3502 BRUSH ST
DETROIT MI 48202

WATSON A GILPIN MD
1539 LOCKRIDGE
BLOOMFIELD HILLS MI 48013

JAMES L GILREATH MD
1800 TUXEDO
DETROIT MI 48206

JOHN GILROY MD
HARPER HOSPITAL
DETROIT MI 48201

HAROLD I GINSBERG MD
18181 W 12 MILE RD
LATHRUP VILLAGE MI 48075

BIRUTE GIRNIUS MD
15439 HARPER
DETROIT MI 48224

CHAS GITLIN MD L

PERRY C GITTINS MD L
2075 W LINCOLN RD
BIRMINGHAM MI 48009

DONOVAN H GIVENS JR MD
3800 WOODWARD
DETROIT MI 48201

WALDEMAR E GIZYNSKI MD
15420 FARMINGTON
LIVONIA MI 48154

GORDON K GLASGOW MD R
395 MOROSS RD
GROSSE PTE FARMS MI 48236

WALTER S GLAZER MD A
5555 GULFSTREAM
SARASOTA FL 33570

RAYMOND B GLEMENT MD L
16126 WOODRING CT
LIVONIA MI 48154

BEN F GLOWACKI MD L
840 JONATHAN
BLOOMFIELD HILLS MI 48013

EDWARD T GLOWACKI MD
54 WEBBER PLACE
GROSSE PTE SHORES MI 48236

RAYMOND M GLOWACKI MD
2421 MONROE
DEARBORN MI 48124

JULIEN GO JR MD
27537 PARKVIEW
WARREN MI 48092

ALEGRO J GODLEY MD
3790 WOODWARD
DETROIT MI 48201

ELMER A GOERKE MD
36663 GODDARD RD
ROMULUS MI 48174

ANGUS G GOETZ MD L
3800 WOODWARD AVE #406
DETROIT MI 48201

MEHMET K GOKNAR MD
NORTHVILLE STATE HOSP
NORTHVILLE MI 48167

ARTHUR GOLDBERG MD
20461 JOHN R ST
DETROIT MI 48203

ALFRED GOLDEN MD
26764 YORK RD
HUNTINGTON WOODS MI 48070

ALFRED GOLDFADEN MD
9122 W FORT ST
DETROIT MI 48209

AUBREY GOLDMAN MD
18400 SCHAEFER
DETROIT MI 48235

PERRY GOLDMAN MD
18050 FAIRWAY DR
DETROIT MI 48221

ROBERT T GOLDMAN MD
WAYNE COUNTY HOSPITAL
ELOISE MI 48132

MILTON H GOLDRATH MD
17000 W 8 MILE RD
SOUTHFIELD MI 48075

ABE S GOLDSTEIN MD
19445 GLOUCESTER DR
DETROIT MI 48203

MAURICE D GOLLMAN MD
17000 W EIGHT MILE RD
SOUTHFIELD MI 48075

ROMUALD H GOMLEY MD
21510 HARPER AVE
ST CLAIR SHORES MI 48080

SALVADOR GONZALEZ MD
28 W ADAMS ST
DETROIT MI 48226

MAXWELL M GOODMAN MD
22265 GARRISON
WEST DEARBORN MI 48124

PAUL A GOODMAN MD
SINAI HOSP
DETROIT MI 48235

VIRGIL P GOODMAN MD
1708 VERNIER RD
GROSSE PTE WOODS MI 48236

WARREN W GOODWIN MD
20101 JAMES COUZENS
DETROIT MI 48235

WILLIAM P GOODWIN MD
1616 BOSTON W
DETROIT MI 48206

MARVIN GORDON MD
DETROIT MEMORIAL HOSP
DETROIT MI 48226

MARTIN J GORELICK MD
23901 MICHIGAN AVE
DEARBORN MI 48124

STEPHEN V GORYL MD
12141 CHARLEVOIX
EAST DETROIT MI 48215

SAML B GOSS MD
26200 GREENFIELD
OAK PARK MI 48237

EDMOND J GOSTINE MD
9750 CHALMERS
DETROIT MI 48213

JAMES E GOTHAM MD
3825 BRUSH ST
DETROIT MI 48201

ABRAHAM G GOTMAN MD
987 E JEFFERSON AVE
DETROIT MI 48207

JACQUES S GOTTLIEB MD
951 E LAFAYETTE
DETROIT MI 48207

SALAH E A GOUDA MD
28633 HOOVER RD
WARREN MI 48093

RAYMOND S GOUX MD L
17566 MUIRLAND AVE
DETROIT MI 48221

JOS M GRACE MD L
31140 HUNTLEY SQUARE
BIRMINGHAM MI 48009

JOS A GRADY MD
946 THREE MILE DR
DETROIT MI 48230

JOHN G GRAHAM JR MD
491 LINCOLN RD
GROSSE PTE MI 48236

THEODORE N GRAHAM MD
2424 PURITAN
DETROIT MI 48238

FRANCIS L GRANGER MD
14160 GRATIOT AVE
DETROIT MI 48205

GEORGE R GRANGER MD
17800 E 8 MILE RD
HARPER WOODS MI 48236

ABRAHAM H GRANT MD
16300 W 9 MILE RD #121
SOUTHFIELD MI 48075

HEMAN E GRANT MD L
BOX 224
BABSON PARK FL 33827

HENRI L GRATTON MD L
12054 PREST
DETROIT MI 48227

JAMES H GRAVES MD
63 KERCHEVAL
GROSSE PTE FARMS MI 48236

HOWARD D GRAY M D
3800 WOODWARD AVE
DETROIT MI 48201

EDWARD W GREEN MD
CHILDRENS HOSPITAL
5224 ST ANTOINE
DETROIT MI 48202

ELLIS R GREEN MD L
11393 INKSTER RD
LIVONIA MI 48150

HENRY L GREEN MD
17214 JEANETTE
SOUTHFIELD MI 48075

LEWIS GREEN MD
29588 FIVE MILE RD
LIVONIA MI 48154

MILTON M GREEN MD
17000 W 8 MILE RD
SOUTHFIELD MI 48075

NELSON W GREEN MD
31815 SOUTHFIELD RD
BIRMINGHAM MI 48009

THOMAS GREEN JR MD
5050 JOY RD
DETROIT MI 48204

JACK R GREENBERG MD
15821 W SEVEN MILE RD
DETROIT MI 48235

JULIUS J GREENBERG MD
22940 SHERVINGTON
SOUTHFIELD MI 48075

MORRIS Z GREENBERG MD
9105 VAN DYKE
DETROIT MI 48213

STANLEY GREENBERG M D
20905 GREENFIELD
SOUTHFIELD MI 48075

JOHN B GREENE MD
2179 W GRAND BLVD
DETROIT MI 48208

THOMAS J GREENE MD
1054 FISHER BLDG
DETROIT MI 48202

WM T GREENLEE MD L
15053 MADDELEIN
DETROIT MI 48205

FRANK S GREENSLIT MD
2021 MONROE
DEARBORN MI 48124

CLARENCE W GREER MD A
4096 LESLIE
DETROIT MI 48238

GERTRUDE B GREGORY MD
P O BOX 3622
FORD TRACTOR PLANT
HIGHLAND PARK MI 48203

LOUIS J GREGORY MD
47 WEBBER PLACE
DETROIT MI 48236

FREDK C GREILING MD
710 NOTRE DAME
DETROIT MI 48230

JOHN H GRIFFIN MD
22101 MOROSS RD
DETROIT MI 48236

ROBERT J GRIFFIN MD
17401 MACK AVE
DETROIT MI 48224

SYDNEY J GRIFFITHS MD
15400 PLYMOUTH RD
DETROIT MI 48227

THOMAS J GRIFKA MD
1400 CHRYSLER EXPWY
DETROIT MI 48207

GREGORY J GRIMALDI MD A
905 HARCOURT
DETROIT MI 48230

ALEXANDER GRINSTEIN MD
18466 WILDEMERE
DETROIT MI 48221

S GRIVA-LIZLOVS MD
6033 MIDDLEBELT
GARDEN CITY MI 48135

JOHN GRIZ MD
3815 PELHAM RD
DEARBORN MI 48124

OTTO GROB MD A
900 CALLE DELOSAMIGOS
SANTA BARBARA CA 93105

CARLOS GRODSINSKY MD
HENRY FORD HOSP
DETROIT MI 48202

JOSE GUERRERO MD L
4285 GLENDALE
DETROIT MI 48238

DAVID S GUDES MD
1080 FISHER BLDG
DETROIT MI 48202

OMAR GUEVARA MD
30900 FORD RD
GARDEN CITY MI 48135

JULIAN M GUIDOT MD
18714 GRAND RIVER
DETROIT MI 48223

ABILIO S GUIMARAES MD L
440 SOUTH DENWOOD
DEARBORN MI 48124

GEO E GUINAN MD L
5012 HOWE RD
WAYNE MI 48184

MOUNIR F GUINDI MD
1080 FISHER BLDG
DETROIT MI 48202

EDWIN R GUISE JR MD
HENRY FORD HOSPITAL
DETROIT MI 48202

SAMI F GUINDI MD
1080 FISHER BLDG
DETROIT MI 48202

ARTHUR E GULICK MD
4160 JOHN R
DETROIT MI 48201

ELISHA S GURDJIAN MD L
1553 WOODWARD AVE
DETROIT MI 48226

EUGENIA E GURSKIS MD
504 KALES BLDG
DETROIT MI 48226

V A GUTIERREZ MD
P O BOX 587
BLOOMFIELD HILLS MI 48013

BENJAMIN R GUTOW MD
12415 E 12 MILE RD
WARREN MI 48093

JOS F GUYON MD
WYANDOTTE HOSP
REHAB CENTER
2331 VAN ALSTYNE BLVD
WYANDOTTE MI 48192

DANIEL R GUYOT MD
3825 BRUSH
DETROIT MI 48201

JACK S GUYTON MD
2799 W GRAND BLVD
DETROIT MI 48202

ELAINE M HACKER MD
763 FISHER BLDG
DETROIT MI 48202

BENJAMIN F HADDAD M D
1010 MICH MUTUAL BLDG
DETROIT MI 48226

ELIAS D HADDAD MD
14636 E SEVEN MILE
DETROIT MI 48205

DONALD HADESMAN MD
985 E JEFFERSON
DETROIT MI 48207

B S HADJIMIHALOGLU MD
2429 E MILWAUKEE
DETROIT MI 48211

H H HAGERMOSER MD
412 EASTLAND CTR BLDG
DETROIT MI 48236

B H HAIDOSTIAN MD
18456 GRAND RIVER
DETROIT MI 48223

ELLEN R HAINES MD
525 SEYBURN
DETROIT MI 48214

LEONARD HAKING MD
14014 E 7 MILE RD
DETROIT MI 48205

G PETER HALEKAS MD
21727 MACK AVE
ST CLAIR SHORES MI 48080

WILLIAM A HALEY MD
781 E GRAND BLVD
DETROIT MI 48207

ARCH H HALL MD
3790 WOODWARD
DETROIT MI 48201

C ROBERT HALL MD A
23581 SENECA
OAK PARK MI 48237

RALPH E HALL MD L
DRUMMOND ISLAND
DRUMMOND MI 49726

RICHARD H HALL MD
28700 EIGHT MILE RD
FARMINGTON MI 48024

WINTHROP D HALL MD
5237 OAKMAN BLVD
DEARBORN MI 48126

LEONARD J HALLEN MD
1335 NICOLET PL
DETROIT MI 48207

RONALD C HAMAKER MD A
712 E PROSPECT
MARSHALL MI 49068

ROBT H HAMBURG MD
1515 DAV WHITNEY BLDG
DETROIT MI 48226

ALBERT C HAMBURGER MD L
865 S PEMBERTON RD
BLOOMFIELD HILLS MI 48013

STUART W HAMBURGER MD
18400 SCHAEFER HWY
DETROIT MI 48235

EDWIN J HAMMER MD
16616 MACK AVE
DETROIT MI 48224

ROY W HAMMER MD
11455 E MCNICHOLS
DETROIT MI 48234

ARTHUR E HAMMOND MD L
1553 WOODWARD AVE
DETROIT MI 48226

JAMES L HAMMOND MD L
1006 MORSE ST
OCEANSIDE CA 92054

RONALD G HAMMOND MD
15830 FORT ST
SOUTHGATE MI 48195

JACK E HANDEL MD
DETROIT MEMORIAL HOSP
DETROIT MI 48226

JOHN W HANSEN MD R
715 W MICHIGAN #703
JACKSON MI 49201

KARL HANYI M D
7645 THORNWOOD
PLYMOUTH MI 48170

CLARENCE M HARDY MD
3745 MONROE
DEARBORN MI 48124

GERALDINE M HARDY MD A
19707 MACK AVE
GROSSE PTE WOODS MI 48236

WARREN G HARDY MD
801 DAV WHITNEY BLDG
DETROIT MI 48226

WM W HARDY JR MD
HENRY FORD HOSPITAL
DETROIT MI 48202

ELY W HARELIK MD L
27385 GREENFIELD
SOUTHFIELD MI 48075

CAMILLE K E HARIZE MD
14807 W MCNICHOLS RD
DETROIT MI 48235

ROMAN W HARKAWAY MD
19120 VAN DYKE
DETROIT MI 48234

GARTH H HARLEY MD
2853 CUESTA WAY
CARMEL CA 93921

LOUIS M HARLEY MD
4100 W MC NICHOLS RD
DETROIT MI 48221

WINFRED B HARM MD L
16150 OXLEY APT 101
SOUTHFIELD MI 48075

EDWIN L HARMON MD L
745 BEDFORD RD
GROSSE PTE PARK MI 48230

R W F HARNETT MD
529 FISHER BLDG
DETROIT MI 48202

JAMES H HARPER MD
KIRWOOD GENERAL HOSP
DETROIT MI 48238

JESSE T HARPER MD L
1110 DAV WHITNEY BLDG
DETROIT MI 48226

EDW B HARRINGTON MD
15212 MICHIGAN AVE
DEARBORN MI 48126

F L HARRINGTON M D
15901 W 9 MILE RD
SOUTHFIELD MI 48075

HARCOURT G HARRIS MD
13800 LIVERNOIS
DETROIT MI 48206

HAROLD H HARRIS MD R
1221 DREW C-1
CLEARWATER FL 33315

IVOR D HARRIS MD
1245 DAVID WHITNEY BLD
DETROIT MI 48226

MICHAEL A HARRIS MD
FORD MOTOR COMPANY
DEARBORN MI 48121

WILLIAM A HARRITY MD
302 EASTLAND PROF BLDG
DETROIT MI 48236

CHARLES E HART M D
23845 VAN DYKE
CENTERLINE MI 48015

ZWI H HART MD
800 N GULLEY RD
DEARBORN MI 48128

HENRY H HARTKOP MD
20055 MACK AVE
DETROIT MI 48236

ROBT J HARTQUIST MD
1495 FORT ST
WYANDOTTE MI 48192

JOHN M HARTZELL MD
7815 E JEFFERSON
DETROIT MI 48214

CLYDE K HASLEY MD L
2320 N LASALLE GARDENS
DETROIT MI 48206

ABDUL A HASSAN MD A
10049 PELHAM RD
ALLEN PARK MI 48101

GERARD R HASSETT MD
ST MARYS HOSPITAL
LIVONIA MI 48151

WALTER W HASSIG MD
20914 KELLY
EAST DETROIT MI 48021

ORVILLE J HASTINGS MD L
15744 HARPER AVE
DETROIT MI 48224

VLADIMIR A HASZCZYC MD
3329 YEMANS
HAMTRAMCK MI 48212

HUBERT R HATHAWAY MD A
154 ENGLEWOOD RD
SPRINGFIELD OH 45504

I JEROME HAUSER MD
7411 THIRD AVE
DETROIT MI 48202

JOHN E HAUSER MD
405 NORTHLAND MED BLDG
SOUTHFIELD MI 48075

MAURICE J HAUSER MD A
7411 THIRD AVE
DETROIT MI 48202

RAOUF R HAWASH MD
19647 JOY RD
DETROIT MI 48228

DAVID B HAWTOF MD
15901 W 9 MILE RD
SOUTHFIELD MI 48075

MOLLY TAN HAYDEN MD
SINAI HOSPITAL
DETROIT MI 48235

ROYAL C HAYDEN JR MD
22000 GREENFIELD
OAK PARK MI 48237

ALLEN L HAYES MD
17431 GREENFIELD
DETROIT MI 48235

LOUIS F HAYES MD
441 E JEFFERSON
DETROIT MI 48226

ROY S HAZEN MD
15121 W 7 MILE RD
DETROIT MI 48235

LEONARD P HEATH MD
1553 WOODWARD AVE
DETROIT MI 48226

LYLE E HEAVNER MD
903 CRESCENT LN
GROSSE PTE WOODS MI 48236

THEOPHILUS H HEENAN MD
1553 WOODWARD AVE
DETROIT MI 48226

ROBERT P HEIDELBERG MD
13701 W SEVEN MILE RD
DETROIT MI 48235

LOUIS E HEIDEMAN MD
4545 WAGON WHEEL DR
BIRMINGHAM MI 48010

EDWARD R HEIL MD
24111 SOUTHFIELD
SOUTHFIELD MI 48075

MARILYN HEINS MD
747 LAKELAND
GROSSE PTE MI 48236

RICHARD F HELDT MD
1951 MONROE BLVD
DEARBORN MI 48124

THOS J HELDT MD L
17 POPLAR PARK
PLEASANT RIDGE MI 48069

MANUEL H HENDELMAN MD
17141 HAYES
DETROIT MI 48205

ALLISON B HENDERSON MD
9041 DEXTER BLVD
DETROIT MI 48206

ARTHUR B HENDERSON MD L
946 BEACONSFIELD RD
GROSSE PTE PARK MI 48230

CHAS W HENDERSON MD
20905 GREENFIELD RD
SOUTHFIELD MI 48075

FREDERIC C HENDERSON
20861 MACK AVE
GROSSE PTE WOODS MI 48236

H R HENDERSON MD
3800 WOODWARD AVE 208
DETROIT MI 48201

HUGH W HENDERSON MD
18601 MACK AVE
DETROIT MI 48236

LESLIE T HENDERSON MD L
832 N RENAUD
GROSSE PTE WOODS MI 48236

ALAN K HENDRA MD
15540 HARPER
DETROIT MI 48224

HUGH C HENDRIE MD
951 E LAFAYETTE
DETROIT MI 48207

FRED N HENIG MD
7605 W SEVEN MILE RD
DETROIT MI 48221

RAYMOND HENKIN MD
17228 SHERVILLA
SOUTHFIELD MI 48075

WM A HENKIN MD
18215 GREENFIELD
DETROIT MI 48235

ALAN T HENNESSEY MD
OAKWOOD HOSP
DEARBORN MI 48121

LAURENCE E HENRICH MD L
105 HAGGERTY RD
PLYMOUTH MI 48170

ROBERT C HENRY MD
725 WATERS EDGE DR
ANN ARBOR MI 48105

HAROLD B HERBST MD
7282 RIVERSTONE RD
BIRMINGHAM MI 48010

MARIA M HERENDA MD
101 E ALEXANDRINE
DETROIT MI 48201

KLAUS HERGT MD
14551 SOUTHFIELD
ALLEN PARK MI 48101

HUGO R HERNANDEZ MD A
NORTHVILLE STATE HOSP
NORTHVILLE MI 48167

EDUARDO M HERRERO MD
21913 CANTERBURY
GROSSE ILE MI 48138

EDUARDO U HERRERO MD
21845 CANTERBURY
GROSSE ILE MI 48138

ROSE E HERROLD M D L
1277 E GRAND BLVD
DETROIT MI 48211

ROY F HERSCHELMANN MD A
3343 GRATIOT AVE
DETROIT MI 48207

ERNEST A HERSHEY JR MD
641 DAVID WHITNEY BLDG
DETROIT MI 48226

JACK H HERTZLER MD
3011 W GRAND BLVD
DETROIT MI 48202

JOHN T HERWICK MD
2799 W GRAND BLVD
DETROIT MI 48202

MURRAY W HESS MD
30650 BRUCE
FRANKLIN MI 48025

PHILIP C HESSBURG MD
20160 MACK AVE
GROSSE PTE WOODS MI 48236

LOUIS F HEYMAN MD
19201 W SEVEN MILE RD
DETROIT MI 48219

C S HEYNER MD
15901 W 9 MILE RD #400
SOUTHFIELD MI 48075

FREDK J HEYNER MD
15901 W 9 MILE RD #400
SOUTHFIELD MI 48075

STANLEY A HEYNER MD
3424 OAKMAN BLVD
DETROIT MI 48204

FREDK G HICKS MD
1000 WESTWOOD
BIRMINGHAM MI 48009

ROBERT H HIGH MD
HENRY FORD HOSP
DETROIT MI 48202

J GILBERTO HIGUERA MD
13700 WOODWARD AVE
DETROIT MI 48203

EDWARD J HILL JR MD
949 DAV WHITNEY BLDG
DETROIT MI 48226

GEORGE C HILL MD
3800 WOODWARD AVE
DETROIT MI 48201

RAYMOND D HILL MD
22190 GARRISON
W DEARBORN MI 48124

WELFORD T HILL MD
8300 MACK AVE
DETROIT MI 48214

GLENN I HILLER MD
15901 W 9 MILE RD #610
SOUTHFIELD MI 48075

JOHN W HILLYER MD
3700 WEST ROAD
TRENTON MI 48183

WM E HILTON MD L
5951 YORKSHIRE RD
DETROIT MI 48224

LEO J HIRSCH MD
1190 E 12 MILE RD
MADISON HEIGHTS MI 48071

LORE HIRSCH MD
212 S MELBORN
DEARBORN MI 48124

A H HIRSCHFELD MD
625 PURDY
BIRMINGHAM MI 48009

CECELIA HISSONG MD
4407 ROEMER
DEARBORN MI 48126

EUGENE HO MD
WYANDOTTE GEN HOSP
WYANDOTTE MI 48192

DONALD V HOBBS MD
17550 W 12 MILE RD
SOUTHFIELD MI 48075

MORTON M HOCHMAN MD
16633 PLYMOUTH RD
DETROIT MI 48227

A ALBERTO HODARI MD
CRITTENTON HOSPITAL
DETROIT MI 48206

JASON HODGES MD
26401 HARPER
ST CLAIR SHORES MI 48081

CHAS P HODGKINSON MD
17546 MEADWOOD AVE
LATHRUP VILLAGE MI 48075

THOS HOFFER MD
5825 ALLEN RD
ALLEN PARK MI 48101

BEN G HOFFMAN MD
19545 SHREWSBURY
DETROIT MI 48221

EDWARD A HOFFMAN MD
7615 W VERNOR HWY
DETROIT MI 48209

EDWIN S HOFFMAN MD R
8106 E JEFFERSON AVE
DETROIT MI 48214

HARRY Y HOFFMAN MD
15085 E SEVEN MILE RD
DETROIT MI 48205

HENRY A HOFFMAN MD A
10015 E OUTER DR
DETROIT MI 48224

MILTON C HOFFMAN MD
18555 E WARREN
DETROIT MI 48236

AZAT HOGIKYAN MD
16901 W MCNICHOLS RD
DETROIT MI 48235

JEAN M HOLDREDGE MD
3011 W GRAND BLVD
DETROIT MI 48202

F WAYNE HOLLINGER MD
5-267 GEN MOTORS BLDG
DETROIT MI 48202

HENRY B HOLLIS MD
6809 SIRENA
DETROIT MI 48210

JANET L HOLLOWAY MD
7430 SECOND
DETROIT MI 48202

M L HOLLOWELL MD
10720 W 7 MILE RD
DETROIT MI 48221

GEO F HOLMES MD
14729 CHAMPAIGN
ALLEN PARK MI 48101

CHAS J HOLT JR MD
1210 S OXFORD
GROSSE PTE MI 48236

HENRY T HOLT MD
5050 CASS ST
DETROIT MI 48202

W S HOLT JR MD
MT CARMEL HOSP
DETROIT MI 48235

EUGENE A HOMEISTER MD
12925 PENNSYLVANIA AVE
WYANDOTTE MI 48192

JOSEPH C HONET MD
SINAI HOSPITAL
DETROIT MI 48235

FRED L HONHART MD L
1405 BERKSHIRE ROAD
GROSSE PTE MI 48230

ANDREW J HOPKINS MD
4407 ROEMER
DEARBORN MI 48126

GEORGE C HOPKINS MD
20464 WEBBER DR
HARPER WOODS MI 48225

SCOVELL M HOPKINS MD
910 DAV BRODERICK TWR
DETROIT MI 48226

GEORGE H HOPSON MD
20101 JAMES COUZENS
DETROIT MI 48235

EARL J HORKINS MD
32316 GRAND RIVER
FARMINGTON MI 48024

ROBT C HORN JR MD
2799 W GRAND BLVD
DETROIT MI 48202

ROBERT J HORNBECK MD
31500 SCHOOLCRAFT RD
LIVONIA MI 48150

HUGO O HORNY MD
1365 CASS AVE
DETROIT MI 48226

OREST E HORODYSKY MD
18055 GREENFIELD
DETROIT MI 48235

EUGENE D HORRELL MD
3800 WOODWARD
DETROIT MI 48201

RICHARD P HORSCH MD
32900 FIVE MILE RD
LIVONIA MI 48154

REECE H HORTON MD
606 NORTHLAND MED CTR
SOUTHFIELD MI 48075

JAMES J HORVATH MD
1553 WOODWARD AVE
DETROIT MI 48226

LORIS M HOTCHKISS MD
33220 W 7 MILE
LIVONIA MI 48152

PHILIP J HOWARD MD L
HENRY FORD HOSP
DETROIT MI 48202

WILLIAM K HOWARD MD
1800 TUXEDO
DETROIT MI 48206

BERT F HOWELL MD
344 MOROSS RD
GROSSE PTE FARMS MI 48236

HOMER A HOWES MD
1515 DAV WHITNEY BLDG
DETROIT MI 48226

HOWARD T HOWLETT MD
868 FISHER BLDG
DETROIT MI 48202

PEDRO G HOYOS MD
55 N DEEPLANDS
GROSSE PTE SHORES MI 48236

LOUIS HROMADKO MD L
7375 PARKSTONE LANE
BIRMINGHAM MI 48010

JOHN P HUBBARD JR MD L
1171 S E SECOND
DEERFIELD BEACH FL 33441

PHILIP J HUBER MD
1724 BASSETT
ROYAL OAK MI 48067

J STEWART HUDSON MD L
114 LOTHROP
DETROIT MI 48236

WM A HUDSON MD L
HUDSONAKERS
JASPER AR 72641

E RAE HUDSPETH MD
763 FISHER BLDG
DETROIT MI 48202

WILFRED A HUEGLI MD
16840 E WARREN AVE
DETROIT MI 48224

CALVIN H HUGHES MD
19959 VERNIER
HARPER WOODS MI 48236

JOHN A HUGHES MD
31940 NOTTINGWOOD
FARMINGTON MI 48024

H HORNE HUGGINS MD
8355 GRATIOT
DETROIT MI 48213

ARTHUR L HUGHETT MD
19959 VERNIER
HARPER WOODS MI 48236

ARCHIE G HULICK MD
1600 TUXEDO
DETROIT MI 48206

LEROY W HULL MD L
6364 COWELL RD
BRIGHTON MI 48116

H ROSS HUME JR MD
3800 WOODWARD AVE #406
DETROIT MI 48201

JAMES J HUMES MD
ST JOHN HOSPITAL
DETROIT MI 48236

THADDEUS S HUMINSKI MD
19244 VAN DYKE AVE
DETROIT MI 48234

ARTHUR R HUMMEL MD
1020 3 MILE DR
GROSSE PTE MI 48236

THEODORE H HUNT MD
19431 VAN DYKE AVE
DETROIT MI 48234

VERNE G HUNT MD L
1553 WOODWARD AVE
DETROIT MI 48226

DONALD G HUNTER MD
3245 E JEFFERSON
DETROIT MI 48207

ROBERT B HUNTER MD
HENRY FORD HOSP
DETROIT MI 48202

CHAS W HUSBAND MD L
14500 W MCNICHOLS
DETROIT MI 48235

RAYMOND C HUSBAND MD
14500 W MC NICHOLS
DETROIT MI 48235

M COLTON HUTCHINS MD
3011 W GRAND BLVD
DETROIT MI 48202

JARVIS M HYATT MD
22265 GARRISON
DEARBORN MI 48124

FREDK W HYDE JR MD
GRACE HOSPITAL
DETROIT MI 48201

JOHN R HYLAND MD
17200 MACK
DETROIT MI 48224

ALIQEMAL HYSNI MD
8011 W VERNOR
DETROIT MI 48209

PETER H IACOBELL MD
19300 VAN DYKE
DETROIT MI 48234

M IACOBELLIS MD
22159 W OUTER DRIVE
DEARBORN MI 48124

GARNET T ICE MD
8401 WOODWARD AVE
DETROIT MI 48202

ELI J IGNA MD
584 LAKELAND
GROSSE PTE MI 48230

LUIS J IGLESIAS MD
3535 W 13 MILE RD
ROYAL OAK MI 48072

ANTONIO IGNAGNI MD
21470 SLOAN DR
DETROIT MI 48236

KAMIL IMAMOGLU MD A
1400 CHRYSLER EXPWY
DETROIT MI 48207

ARTURO D IMPERIAL MD
770 FISHER BLDG
DETROIT MI 48202

NAPOLEON C IMPERIO MD
22231 W OUTER DR
DEARBORN MI 48124

SAMUEL INDENBAUM MD
18400 SCHAEFER HWY
DETROIT MI 48235

NARCISO O INEZ MD
3800 WOODWARD AVE
DETROIT MI 48201

MYUNG YUL INE MD
1800 TUXEDO
DETROIT MI 48206

HARRY O INGBERG MD
261 BRADY
DETROIT MI 48201

CHARLES N INNISS MD
3750 WOODWARD AVE
DETROIT MI 48201

EARLE A IRVIN MD R
FORD MOTOR CO AMERICA
DEARBORN MI 48121

WM A IRWIN MD
16001 9 MILE RD
SOUTHFIELD MI 48075

HAROLD E ISAACSON MD
15361 PLYMOUTH RD
DETROIT MI 48227

JO D ISAACSON MD
26008 PEMBROKE
HUNTINGTON WOODS MI 48070

F F ISHAC MD
38241 SOUTHFARM
NORTHVILLE MI 48167

BARNEY B ISRAEL MD L
663 FISHER BLDG
DETROIT MI 48202

H DAVID ITKIN MD
257500 W OUTER DR
LINCOLN PARK MI 48146

HERBERT T IWATA MD
19616 BRANDYWINE
RIVERVIEW MI 48192

BERNICE IZNER MD
16500 NO PARK DR #1414
SOUTHFIELD MI 48075

DAVID JACKNOW MD
60 W HANCOCK
DETROIT MI 48201

FRANKLIN R JACKSON MD
10730 W 7 MILE RD
DETROIT MI 48221

NANCY E JACKSON MD
33750 FREEDOM RD
FARMINGTON MI 48024

WINSTON B JACKSON MD
12720 W SEVEN MILE RD
DETROIT MI 48235

DAVID M JACOBS MD
10601 W 7 MILE RD
DETROIT MI 48221

HOWARD JACOBS MD
18241 GREENFIELD
DETROIT MI 48235

LYLE F JACOBSON MD
5224 ST ANTOINE
DETROIT MI 48202

SAML D JACOBSON MD
WAYNE CO GENL HOSP
ELOISE MI 48132

WAYNE N JACOBUS MD
20055 MACK AVE
GROSSE PTE MI 48236

J R JACONETTE MD
MT CARMEL MERCY HOSP
DETROIT MI 48235

GROVE A JAEGER MD
11711 MINDEN
DETROIT MI 48205

CLARENCE N JAEKEL MD L
433 LEXINGTON
GROSSE PTE MI 48236

DONALD J JAFFAR MD
15901 W 9 MILE RD #514
SOUTHFIELD MI 48075

HAROLD W JAFFE M D
1073 FISHER BLDG
DETROIT MI 48202

JACOB JAFFE MD A
11740 WILSHIRE
LOS ANGELES CA 90025

LOUIS JAFFE MD
18662 MUIRLAND
DETROIT MI 48221

WM E JAHSMAN MD R
501 MANDALAY AVE G18
CLEARWATER BEACH FL 33515

RICHARD WM JAKACKI MD
36157 SHERWOOD
LIVONIA MI 48154

THOS J JAMIESON MD L
2058 FERRIS
LINCOLN PARK MI 48146

ROBERT S JAMPEL MD
690 MULLETT ST
DETROIT MI 48226

NATALIA J JANICKI MD
ELOISE HOSP
ELOISE MI 48132

HAROLD F JARVIS MD
360 MOROSS
DETROIT MI 48236

LAWRENCE J JASION MD A
11945 PAYTON
DETROIT MI 48224

RICHARD V JAYNES MD
6033 MIDDLEBELT
GARDEN CITY MI 48135

BENJ JEFFRIES MD
19959 VERNIER RD
HARPER WOODS MI 48236

WM JEND JR MD
1365 CASS AVE
DETROIT MI 48226

BARBARA J JENKINS MD
19250 CANTERBURY
DETROIT MI 48221

ELWOOD A JENKINS MD
610 DAV WHITNEY BLDG
DETROIT MI 48226

CHAS G JENNINGS MD
1585 ALINE DR
DETROIT MI 48236

VIGGO W JENSEN MD
17850 MAUMEE
DETROIT MI 48230

WILLIAM H JEVONS MD
8425 TWELVE MILE RD
WARREN MI 48093

F C JEWELL MD
21510 HARPER AVE
ST CLAIR SHORES MI 48080

PATRICK F JEWELL MD
EASTLAND CENTER
PROF BLDG #232

HARPER WOODS MI 48225

JOHN S JEWELL MD
2021 MONROE SUITE 203
DEARBORN MI 48124

MARVIN R JEWELL MD
CHILDRENS HOSPITAL
DETROIT MI 48202

MARION W JOCZ MD R
1501 N RIVER RD #102
ST CLAIR MI 48079

EMERY O JODAR MD L
P O BOX 667
HUGHSON CA 95326

LOYAL W JODAR MD
18412 MACK
GROSSE PTE MI 48236

ARAN S JOHNSON MD
642 BLAIRMOOR CT
GROSSE PTE WOODS MI 48236

ARTHUR J JOHNSON MD
3800 WOODWARD #514
DETROIT MI 48201

GAGE JOHNSON MD
2785 S FORT ST
DETROIT MI 48217

THOS D JOHNSON MD
18530 GRAND RIVER
DETROIT MI 48223

VERNE E JOHNSON MD
2119 MONROE AVE
DEARBORN MI 48124

VERNON P JOHNSON MD L
21327 HARPER AVE
ST CLAIR SHORES MI 48080

WALLACE E JOHNSON MD
HENRY FORD HOSPITAL
DETROIT MI 48202

WILBUR E JOHNSON M D
14654 GRATIOT
DETROIT MI 48205

WM H M JOHNSON MD L
7157 63 MICHIGAN
DETROIT MI 48210

EVERETT V JOHNSTON MD L
4726 N W 49TH CT
FT LAUDERDALE FL 33313

GLEN A JOHNSTON MD
369 GLENDALE
DETROIT MI 48203

HERBERT C JOHNSTON MD
3001 MILLER RD
FORD MOTOR CO
ROUGE PLANT
DEARBORN MI 48121

JOS A JOHNSTON MD L
HENRY FORD HOSP
DETROIT MI 48202

WM E JOHNSTON MD L
9000 E JEFFERSON #25-9
DETROIT MI 48214

BENJ I JOHNSTONE MD L
31 OAKLAND PARK
PLEASANT RIDGE MI 48069

EUCLIDE V JOINVILLE MD L
28 W ADAMS AVE
DETROIT MI 48226

CECIL R JONAS MD
8942 DEXTER
DETROIT MI 48206

ARNOLD M JONES MD
3706 STURTEVANT
DETROIT MI 48206

DON P JONES MD
90 SUNNINGDALE DR
GROSSE PTE SHORES MI 48236

G RICHARD JONES MD
18412 MACK AVE
DETROIT MI 48236

RICHARD J JONES MD
MT CARMEL MERCY HOSP
DETROIT MI 48235

ROY O JONES MD L
104 BIRCH CT
FOREST HILLS

HOLIDAY FL 33589

WM J JONES MD
8209 ALLEN RD
ALLEN PARK MI 48101

THAD H JOOS MD
20361 MACK AVE
GROSSE PTE WOODS MI 48236

PRESCOTT JORDAN JR MD
5224 ST ANTOINE
DETROIT MI 48202

RAMON R JOSEPH MD
WAYNE CO GEN HOSP
ELOISE MI 48132

DAYA P JOSHI MD
987 E JEFFERSON AVE
DETROIT MI 48207

STANLEY J JOYCE MD L
478 ST CLAIR
GROSSE PTE MI 48230

MYRON H JOYRICH MD
SINAI HOSPITAL
DETROIT MI 48235

JOSEPH F JULIAR MD
20501 OLDHAM RD #206
SOUTHFIELD MI 48075

BENJ JULIAR MD
17305 MUIRLAND AVE
DETROIT MI 48221

JOHN B JUNCKER MD
OAKWODD HOSPITAL
DEARBORN MI 48124

R V JUNGWIRTH MD
19350 W MCNICHOLS RD
DETROIT MI 48219

JAMES E KACKLEY MD
18495 MACK
DETROIT MI 48236

AHMAD KAFI MD
20101 JMS COUZENS HWY
DETROIT MI 48235

THOMAS R KAIN MD
3245 E JEFFERSON AVE
DETROIT MI 48207

HENRY D KAINE MD
3011 W GRAND BLVD
DETROIT MI 48202

PETER J KALABAT MD
ST JOSEPH MERCY HOSP
DETROIT MI 48211

BERNARD S KALAYJIAN MD R
30676 HARLINCIN CT
FRANKLIN MI 48025

NATHAN KALICHMAN MD
23300 GREENFIELD #123
OAK PARK MI 48237

RUDOLF W KALLENBACH MD
388 INKSTER RD
INKSTER MI 48141

HERBERT I KALLET MD L
651 FISHER BLDG
DETROIT MI 48202

MAERIT B KALLET MD
1800 TUXEDO
DETROIT MI 48206

DAVID KALLMAN MD L
2351 W GRAND BLVD
DETROIT MI 48208

LEO KALLMAN MD L
2351 W GRAND BLVD
DETROIT MI 48208

REUBEN R KALLMAN MD
2631 WOODWARD AVE
DETROIT MI 48201

ANGELDS A KAMBOURIS MD
18255 W MCNICHOLS RD
DETROIT MI 48219

RICHARD S KAMIL MD
14438 W MCNICHOLS
DETROIT MI 48235

JOHN W KAMINSKI MD
3001 MILLER RD
DEARBORN MI 48120

ROBERT F KANDEL MD
HENRY FORD HOSP
DETROIT MI 48202

ARCHIBALD V KANE MD
BOX 1108 NORTHLAND CTR
SOUTHFIELD MI 48075

SELMA KANSA M D
19431 VAN DYKE
DETROIT MI 48234

HERMAN KANTER MD L
16222 OXLEY RD APT 103
SOUTHFIELD MI 48075

SHELDON M KANTOR MD
17550 W 12 MILE RD
SOUTHFIELD MI 48075

ADRIAN KANTROWITZ MD
SINAI HOSPITAL
DETROIT MI 48235

DON I KAPETANSKY MD
16400 N PARK DR #116
SOUTHFIELD MI 48075

NATHAN J KAPETANSKY MD
16400 N PARK DR
SOUTHFIELD MI 48075

WALTER A KAPLITA MD
60 FONTANA LANE
GROSSE PTE SHORES MI 48236

K H KAPPHAHN MD
HENRY FORD HOSP
DETROIT MI 48202

PHILIP C KARAMATAS MD
10822 W WARREN
DEARBORN MI 48126

SAUL KARCH MD
18080 MUIRLAND
DETROIT MI 48221

JAMES J KARO MD
HENRY FORD HOSPITAL
DETROIT MI 48202

ARTHUR A KASELEMAS MD
22341 W 8 MILE RD
DETROIT MI 48219

A S KASIBORSKI MD
2300 OAK STREET
WYANDOTTE MI 48192

JOS A KASPER MD L
1011 CADIEUX RD
GROSSE PTE PARK MI 48230

ALBERT J KASPOR MD
20901 MOROSS RD
DETROIT MI 48236

ARNOLD KASS MD
1316 DAVID STOTT BLDG
DETROIT MI 48226

LAWRENCE KATZ MD
987 E JEFFERSON
DETROIT MI 48207

MARTIN KATZ MD
12794 VERONICA DR
SOUTHGATE MI 48195

STUART KATZ MD
22341 W EIGHT MILE
DETROIT MI 48219

IRVING S KATZMAN MD L
848 FISHER BLDG
DETROIT MI 48202

JACK H KAUFMAN MD
17421 GREENFIELD
DETROIT MI 48235

LOUIS W KAUFMAN MD
23077 GREENFIELD
SOUTHFIELD MI 48075

WILLIAM H KAUFMAN MD
6525 PARK AVE
ALLEN PARK MI 48101

JAMES KAWCHAK M D
FORD MOTOR CO
DEARBORN MI 48121

LUCIAN KAWECKI MD
10734 HART AVE
HUNTINGTON WOODS MI 48070

CONRAD A KAWEL JR MD
10955 FARMINGTON RD
LIVONIA MI 48150

CENGIZ KAYI MD
NORTHVILLE STATE HOSP
NORTHVILLE MI 48167

MORRIS KAZDAN MD
4619 ALLEN ROAD
ALLEN PARK MI 48101

EDGAR B KEEMER JR MD
1111 DAV WHITNEY BLDG
DETROIT MI 48226

HENRY J KEHOE MD L
7047 E ORANGE BLOSM LN
SCOTTSDALE ARIZ 85253

RACHEL H C B KEITH MD
3800 WOODWARD AVE
DETROIT MI 48201

FRANK J KELLEY MD
853 FISHER BLDG
DETROIT MI 48202

A P KELLY JR MD
HENRY FORD HOSP
DETROIT MI 48202

JOHN J KELLY MD
14729 CHAMPAIGN
ALLEN PARK MI 48101

L J KELLY MD
14015 GRATIOT
DETROIT MI 48205

VICTOR A KELMENSON MD
475 FISHER BLDG
DETROIT MI 48202

MALCOLM J KELSON MD
1045 HARVARD
DETROIT MI 48230

JAMES M KENNARY MD
4900 CADIEUX RD
DETROIT MI 48224

JAMES M KENNARY JR MD
4900 CADIEUX RD
DETROIT MI 48224

DONALD J KENNEDY MD
410 NORTH SHORE DR
ST CLAIR SHORES MI 48080

G HOWARD KENT MD
8300 MACK AVE
DETROIT MI 48207

JAMES E KERMATH MD
15101 SOUTHFIELD
ALLEN PARK MI 48101

MELVIN O KERNICK MD L
13700 WOODWARD AVE
HIGHLAND PARK MI 48203

GEORGE R KERWIN MD
22149 CHATSFORD CIR
SOUTHFIELD MI 48075

KARL J KESSEL MD
21421 KELLY RD
EAST DETROIT MI 48021

CHAS KESSLER MD
18241 GREENFIELD
DETROIT MI 48235

JOHN W KEYES MD
HENRY FORD HOSP
DETROIT MI 48202

ELIE R KHOURY MD
8300 MACK AVE
DETROIT MI 48214

RONALD B KIHN MD
125 CHEWTON RD
BIRMINGHAM MI 48010

DEMETROIS KIKAS MD
1800 TUXEDO
DETROIT MI 48206

CHAS G KILLINS MD
8100 E JEFFERSON
DETROIT MI 48214

SOON KUYN KIM MD
P O BOX 172
ELOISE MI 48132

YOUNG SONG KIM MD
3800 WOODWARD AVE
DETROIT MI 48201

K K KIMBERLIN JR M D
11110 MORANG DRIVE
DETROIT MI 48224

EDWARD D KING MD L
270 RIVARD
GROSSE PTE MI 48230

MELBOURNE J KING MD
5435 W VERNOR HWY
DETROIT MI 48209

ROY C KINGSWOOD MD L
EXCELLO CORP BOX 386
DETROIT MI 48232

JOHN R KIRKPATRICK MD
WAYNE STATE UNIV
DETROIT MI 48201

JOHN L KITZMILLER MD
15901 W 9 MILE RD
SOUTHFIELD MI 48075

ROGER G KLAIBER MD
1541 EDSEL DRIVE
TRENTON MI 48183

HERMAN KLEIN MD
5030 WALLBROOK
BIRMINGHAM MI 48010

HOWARD A KLEIN MD
1846 DAV WHITNEY BLDG
DETROIT MI 48226

SANDER P KLEIN MD
14825 W MC NICHOLS RD
DETROIT MI 48235

SHMARYA KLEINMAN MD L
1800 TUXEDO
DETROIT MI 48206

KARL S KLICKA MD
33101 ANNAPOLIS
WAYNE MI 48184

DAVID KLIGER MD L
7756 SOUTHFIELD
DETROIT MI 48228

M M KLIMCHUK MD
620 EASTLAND CENTER
PROFESSIONAL BLDG

HARPER WOODS MI 48225

EDW J KLIMKOWSKI MD
23871 MCNICHOLS
DETROIT MI 48227

GEORGE A KLING MD
HARPER HOSPITAL
DETROIT MI 48201

MURRAY G KLING MD
22341 W EIGHT MILE
DETROIT MI 48219

GEORG H E KLUTKE MD
2841 MONROE
DEARBORN MI 48124

CASSANDRA M KLYMAN MD
20905 GREENFIELD
SOUTHFIELD MI 48075

EARL J KNAGGS MD
2387 FORT ST
WYANDOTTE MI 48192

FLOYD B KNAPP MD R
202 MAPLE GROVE AVE
PRUDENVILLE MI 48651

GARY H KNAPP MD
23611 GODDARD
TAYLOR MI 48180

WM L KNAPP MD
27740 DEVONSHIRE DR
SOUTHFIELD MI 48075

ROBT S KNIGHTON MD
2799 W GRAND BLVD
DETROIT MI 48202

EDMUND J KNOBLOCH MD L
5933 CHENE ST
DETROIT MI 48211

STUART A KNOTT MD
100 OAK ST
WYANDOTTE MI 48192

ROSS M KNOX MD L
3180 FORT ST
LINCOLN PARK MI 48146

SIDNEY D KOBERNICK MD
6767 W OUTER DR
DETROIT MI 48235

JOSEF M KOBILJAK MD
14876 WARWICK
ALLEN PARK MI 48101

STEFAN H KOBILJAK MD
3516 FORT STREET
LINCOLN PARK MI 48146

EUGENE J KOCHKODAN MD
2799 W GRAND BLVD
DETROIT MI 48202

RAYMOND H KOEBEL MD L
409 N SHORE DR
ST CLAIR SHORES MI 48080

SHAHIN B KOEGLER MD
DETROIT GENERAL HOSP
DETROIT MI 48226

BENJAMIN F KOEPKE MD
35550 MICHIGAN AVE
WAYNE MI 48184

EDWARD J KOERBER MD L
42 BRIARCLIFF PL
DETROIT MI 48236

NATALIO KOGAN MD
3379 PIQUETTE
DETROIT MI 48211

CONSTANTINE S KOGUT MD
18181 W 12 MILE RD
LATHRUP VILLAGE MI 48075

MARY J KOKOSKY MD
HENRY FORD HOSPITAL
DETROIT MI 48202

RAYMOND J KOKOWICZ MD
19440 VAN DYKE
DETROIT MI 48234

ISADORE I KOLMAN MD
1800 TUXEDO
DETROIT MI 48206

HARVEY J KOMORN MD
17000 W EIGHT MILE RD
SOUTHFIELD MI 48075

JOHN D KONDOMERKOS MD
33020 PALMER ROAD
WAYNE MI 48184

LEIGHTON N L KONG MD
GRACE HOSP
DETROIT MI 48201

EDW T KONNO MD
1400 CHRYSLER FREEWAY
DETROIT MI 48207

JOE M KOPMEYER JR MD
702 PARKMAN
BLOOMFIELD HILLS MI 48013

VALENTINE L KORAN MD
1306 KALES BLDG
DETROIT MI 48226

LOUIS KOREN MD
650 DAV WHITNEY BLDG
DETROIT MI 48226

THOMAS E KORNACKI MD A
3461 CAMBRIDGE
DETROIT MI 48235

LYLE W KORUM MD
18585 E WARREN ST
DETROIT MI 48236

H K KOSCHNITZKE MD
15101 SOUTHFIELD
ALLEN PARK MI 48101

ADAM W KOSSAYDA MD
15324 MICHIGAN AVE
DEARBORN MI 48126

DENNIS D KOVAN MD L
23077 GREENFIELD
SOUTHFIELD MI 48075

JOHN J KOWALESKI MD
3755 FORT ST
LINCOLN PARK MI 48146

ANTHONY E KOZLINSKI MD
2195 E GRAND BLVD
DETROIT MI 48211

K L KRABBENHOFT MD
3825 BRUSH ST
DETROIT MI 48201

RAYMOND B KRAFT MD R
700 S OCEAN BLVD
BOCA RATON FL 33432

RUTH M KRAFT M D
19164 DEVONSHIRE RD
BIRMINGHAM MI 48009

BERNARD KRAKAUER MD
17716 W SEVEN MILE RD
DETROIT MI 48235

EDWARD W KRASS MD
11088 GRATIOT AVE
DETROIT MI 48213

JOHN J KRAUS MD
16840 E WARREN AVE
DETROIT MI 48224

CHARLES J KRAWEC MD
MT CARMEL MERCY HOSP
DETROIT MI 48235

GEO E KREINBRING MD
14295 E 7 MILE RD
DETROIT MI 48205

JOHN C KRETZSCHMAR MD
660 E GRAND BLVD
DETROIT MI 48207

DAVID A KREVSKY MD
8449 PARK
ALLEN PARK MI 48101

HAROLD KREVSKY MD
8449 PARK AVENUE
ALLEN PARK MI 48101

SEYMOUR KREVSKY MD
732 FISHER BLDG
DETROIT MI 48202

HERBERT KRICKSTEIN MD
22101 MOROSS RD
DETROIT MI 48236

EARL G KRIEG MD A
134 N WATER ST
MARINE CITY MI 48039

HARLEY L KRIEGER MD R
11390 STRATHMOUR
DETROIT MI 48227

KARL T KRISTEN MD
MT CARMEL MERCY HOSP
DETROIT MI 48235

MAURICE J KRITCHMAN MD L
23237 PROVIDENCE DR
APARTMENT 301

SOUTHFIELD MI 48075

LAWRENCE A KROHA MD
19787 MACK
GROSSE PTE MI 48236

LAWRENCE H KROHN MD
24340 W MCNICHOLS RD
DETROIT MI 48219

H HARVEY V KROLL MD
21327 HARPER AVE
ST CLAIR SHORES MI 48080

RONALD L KROME MD
1326 ST ANTOINE ST
DETROIT MI 48226

JAMES A KRUG MD
32238 SCHOOLCRAFT
LIVONIA MI 48150

LAWRENCE KRUGEL MD
19481 LIVERNOIS
DETROIT MI 48221

EDWARD A KRULL MD
482 RIVARD BLVD
GROSSE PTE MI 48230

FRANCIS X KRYNICKI MD L
2717 GOLFVIEW DR
TROY MI 48084

FRANCIS S KUCMIERZ MD
18934 VAN DYKE AVE
DETROIT MI 48234

NED N KUEHN MD
20203 WELLESLEY BLVD
BIRMINGHAM MI 48010

JAMES M KUHLMAN MD
3800 WOODWARD AVE
DETROIT MI 48201

ALBERT A KUHN MD
635 W SEVEN MILE RD
DETROIT MI 48203

HENRY H KUHN MD
635 W SEVEN MILE RD
DETROIT MI 48203

RICHARD F KUHN MD
1700 JUNCTION AVE
DETROIT MI 48209

WALTER F KUJAWSKI MD
17800 E EIGHT MILE RD
DETROIT MI 48236

SUSHIL KUMAR MD
690 MULLETT ST
DETROIT MI 48226

HAROLD J KULLMAN MD A
930 BEECHMONT
DEARBORN MI 48124

LIONEL V KURAN MD
15212 MICHIGAN AVE
DEARBORN MI 48126

JOS A KURCZ MD
7433 MICHIGAN AVE
DETROIT MI 48210

IRVIN J KURTZ MD
25210 GRAND RIVER
DETROIT MI 48240

RAYMOND S KURTZMAN MD
DETROIT MEMORIAL HOSP
DETROIT MI 48226

JOHN D KUTSCHE MD
3794 FORT ST
TRENTON MI 48183

BENJ KVIETYS MD
27235 JOY RD
DEARBORN MI 48127

S A KWASIBORSKI MD
2300 OAK ST
WYANDOTTE MI 48192

WM V KYLE JR MD
8780 GRAND RIVER
DETROIT MI 48204

JAMES M LABERGE MD
100 OAK
WYANDOTTE MI 48192

LEONARD W LACHOVER MD
15230 LESLIE
OAK PARK MI 48237

LAWRENCE S LACKEY MD
310 VISGER
RIVER ROUGE MI 48218

GEORGE E LACROIX MD
695 VAUGHAM RD
BLOOMFIELD HILLS MI 48013

DAVID C LADERACH MD
3001 MILLER RD
FORD MOTOR CO

DEARBORN MI 48121

ALFRED D LA FERTE MD L
667 NEFF ROAD
GROSSE PTE MI 48230

M M LAHAM MD
2929 FORT ST
WYANDOTTE MI 48192

MICHAEL J LAHOOD MD
20001 GREENFIELD
DETROIT MI 48235

RAYMOND J LAIGE MD A
PO BOX 1259
DETROIT MI 48231

LOUIS J LAJOIE MD
601 PIQUETTE
DETROIT MI 48202

GEORGE C LAKATOS MD
33020 PALMER
WAYNE MI 48184

ROBT C LAKE MD
8445 E JEFFERSON
DETROIT MI 48214

ALAN C LAKIN MD
17431 GREENFIELD
DETROIT MI 48235

MERVYN H LAKIN MD
18900 W TEN MILE RD
SOUTHFIELD MI 48075

CHAS B LAKOFF MD L
8233 W CHICAGO BLVD
DETROIT MI 48204

MANULAL LALA MD A
GRACE HOSPITAL
DETROIT MI 48201

CONRAD R LAM MD
HENRY FORD HOSPITAL
DETROIT MI 48202

FRANK A LAMBERSON MD A
1666 PENNSYLVANIA
WINTER PARK FL 32789

JAMES V LAMMY MD L
20867 MACK
DETROIT MI 48236

RICHARD L LAMONT MD
3815 PELHAM RD
DEARBORN MI 48124

GAETAN LAMONTAGNE MD
13479 NORTHLINE
SOUTHGATE MI 48195

HAROLD H LAMPMAN MD L
3011 W GRAND BLVD
DETROIT MI 48202

JAMES W LANDERS MD
1507 SUNNINGDALE
GROSSE PTE WOODS MI 48236

MAURICE B LANDERS MD
275 W GRAND BLVD
DETROIT MI 48216

ERNST F LANG MD
3790 WOODWARD
DETROIT MI 48201

WM A LANGE MD
3790 WOODWARD AVE
DETROIT MI 48201

JOHN D LANGSTON MD
1420 ST ANTOINE ST
DETROIT MI 48226

GEO M LANING MD L

EUGENE H LANSING MD
33116 PALMER RD
WESTLAND MI 48184

MANDELL LANSKY MD
16339 E WARREN
DETROIT MI 48224

ALFRED M LARGE MD
19515 MACK AVE
GROSSE PTE WOODS MI 48236

DONALD J LARGO M D
16717 WARWICK
DETROIT MI 48219

DUANE R LARKIN MD
28435 PLYMOUTH
LIVONIA MI 48150

RICHARD I LARNED MD
15208 BRINGARD
DETROIT MI 48205

EDWARD G LARSEN MD
2421 FORT ST
TRENTON MI 48183

ROBT D LARSEN MD
3800 WOODWARD AVE #614
DETROIT MI 48201

RONALD R LARSON MD
18101 OAKWOOD BLVD
DEARBORN MI 48122

BROR H LARSSON MD L
81 E KIRBY AVE
DETROIT MI 48202

ANDREW G LASICHAK MD
76 W ADAMS AVE
DETROIT MI 48226

JAMES W LASLEY MD
2058 BOOTMAKER LANE
BLOOMFIELD HILLS MI 48013

FREDK R LATIMER MD
28 W ADAMS
DETROIT MI 48226

KARL K LATTEIER MD
6145 BLUE BEECH RD
ROCHESTER MI 48063

EDWARD H LAUPPE MD L
1553 WOODWARD AVE
DETROIT MI 48226

ALBERT L LAURA MD
9105 HARRISON
LIVONIA MI 48150

EUGENE LAURISIN MD L
3019 W 13 MILE APT 413
ROYAL OAK MI 48073

CARL B LAUTER MD A
550 E CANFIELD
DETROIT MI 48201

ERIC W LAUTER MD
1800 TUXEDO
DETROIT MI 48206

FRANK K LAWAND MD
4510 W WARREN
DETROIT MI 48210

LOUIS F LAWRENCE MD
15901 W 9 MILE RD
SOUTHFIELD MI 48075

NOEL S LAWSON MD
22101 MOROSS RD
DETROIT MI 48236

MORTON R LAZAR MD
20905 GREENFIELD
SOUTHFIELD MI 48075

DAVID LEACH MD R
430 FISHER BLDG
DETROIT MI 48202

ROBT B LEACH MD
3535 W 13 MILE RD
ROYAL OAK MI 48072

WENDELL L LEACH MD
10811 E WARREN
DETROIT MI 48214

ROBT C LEACOCK MD L
440 UNIVERSITY PL
GROSSE PTE MI 48236

LUTHER R LEADER MD L
3535 W 13 MILE RD
ROYAL OAK MI 48072

L ROSS LEAVER MD R
9508 CRESCENT BEACH DR
PIGEON MI 48755

A T LEBAMOFF MD
14801 SOUTHFIELD RD
ALLEN PARK MI 48101

PHILIP LEBLANC MD
DETROIT GENERAL HOSP
DETROIT MI 48226

MONROE S LECHNER MD
P O BOX 1919
DETROIT MI 48231

A F LECKLIDER MD R
848 BERKSHIRE RD
GROSSE PTE MI 48230

FRANK LEE MD
501 MEADOWLANE DR
DEARBORN MI 48124

HARRY E LEE MD L
13616 GRATIOT AVE
DETROIT MI 48205

HI SUNG LEE MD
WAYNE CO GEN HOSP
ELOISE MI 48132

PYONG TAI LEE MD
15901 W 9 MILE RD
SOUTHFIELD MI 48075

YOUNG MO LEE MD
25210 GRAND RIVER
DETROIT MI 48240

LOUIS S LEIPSITZ MD
3566 CASS AVE
DETROIT MI 48201

FORREST C LEITER MD
P O BOX 527
ROCHESTER IND 46975

LOUIS S LELAND MD
867 GROSSE PTE COURT
GROSSE PTE MI 48230

SOLOMON LELAND MD
6563 GRAND RIVER
DETROIT MI 48208

CLARK F LEMLEY MD L
3011 W GRAND BLVD
DETROIT MI 48202

BRUCE K LEMON MD
20905 GREENFIELD
SOUTHFIELD MI 48075

JAMES J LENTINE MD
15831 MACK AVE
DETROIT MI 48224

WILLARD R LENZ MD
418 MORAN RD
DETROIT MI 48236

CECIL W LEPARD MD
1553 WOODWARD AVE
DETROIT MI 48226

FRED D LEPLEY MD L
19799 MACK AVE
GROSSE PTE WOODS MI 48236

FREDERICK J LEPLEY MD
19803 MACK
GROSSE PTE MI 48236

SAML I LERMAN MD
18330 PARKSIDE
DETROIT MI 48221

A MARTIN LERNER MD
432 E HANCOCK
DETROIT MI 48201

JOHN M LESESNE MD
17770 MACK AVE
DETROIT MI 48224

ARNOLD L LESHMAN MD
18181 W 12 MILE RD
LATHRUP VILLAGE MI 48076

FATELLA L LESSANI MD
ST MARYS HOSPITAL
LIVONIA MI 48154

MELVIN A LESTER MD
26831 WOODWARD AVE
HUNTINGTON WDS MI 48070

JOS S LESZYNSKI MD L
8120 E JEFFERSON
DETROIT MI 48214

TRAIAN LEUCUTIA MD L
SHERATON CAD HOTEL
DETROIT MI 48226

DAVID I LEVADI MD
15635 TWELVE MILE RD
SOUTHFIELD MI 48075

FLOYD B LEVAGOOD MD
23100 CHERRY HILL RD
DEARBORN MI 48124

ARTHUR B LEVANT MD
15715 E WARREN
DETROIT MI 48224

MALCOLM L LEVENSON MD
24500 CUSTIS
SOUTHFIELD MI 48075

IRA LEVENTER MD
20211 ANN ARBOR TRAIL
DEARBORN MI 48127

WALTER G LEVICK MD
19959 VERNIER
HARPER WOODS MI 48236

DAVID M LEVIN MD A
5628 NORTH 12TH ST
PHOENIX AZ 85014

HERBERT G LEVIN MD
16500 NORTH PARK #101
SOUTHFIELD MI 48075

M MITCHEL LEVIN MD L
20905 GREENFIELD
SOUTHFIELD MI 48075

SAML J LEVIN MD L
3011 W GRAND BLVD
DETROIT MI 48202

EDWARD E LEVINE MD
12891 SHERWOOD
HUNTINGTON WOODS MI 48070

IRVING LEVITT MD
870 UNITED NATNS PLAZA
NEW YORK N Y 10017

NATHAN LEVITT MD L
1007 KALES BLDG
DETROIT MI 48226

DAVID B LEVY MD
29594 FIVE MILE RD
LIVONIA MI 48154

STANLEY H LEVY MD
10601 SEVEN MILE RD
DETROIT MI 48221

BENJAMIN M LEWIS MD
1401 RIVARD
DETROIT MI 48207

HARVEY Y LEWIS MD
18181 W 12 MILE RD
LATHRUP VILLAGE MI 48075

J HUGH LEWIS MD L
1543 FORD AVE
WYANDOTTE MI 48192

LEE A LEWIS MD
2730 E JEFFERSON AVE
DETROIT MI 48207

WILFRID J LEWIS MD L
10 PETERBORO ST
DETROIT MI 48201

DANIEL K LI MD
13118 FORT ST
SOUTHGATE MI 48195

ROBT V LIBBRECHT MD
6540 PARK AVE
ALLEN PARK MI 48101

MAX L LICHTER MD
2900 OAKWOOD BLVD
MELVINDALE MI 48127

ARTHUR G LIDDICOAT MD L
20125 FENKELL
DETROIT MI 48223

KIM K LIE MD
3800 WOODWARD #1206
DETROIT MI 48201

BARNARD L LIEBERMAN MD R
668 EL CENTRO LGBT KEY
SARASOTA FL 33577

JAMES J LIGHTBODY MD L
7815 E JEFFERSON
DETROIT MI 48214

ARNOLD E LIGHTBOURN MD
3800 WOODWARD AVE
DETROIT MI 48201

GEO A LIGHTBOURN MD
3800 WOODWARD AVE #808
DETROIT MI 48201

RUDOLPH W LIGNELL MD
401 NORTHLAND MED BLDG
SOUTHFIELD MI 48075

JOSEPH A LIIOI MD
17000 W 8 MILE RD
SOUTHFIELD MI 48075

ROBERT P LILLY MD
15240 MERRIMAN RD
LIVONIA MI 48154

JESS LIM MD
15101 SOUTHFIELD
ALLEN PARK MI 48101

WILLIAM LIM MD
NORTHVILLE STATE HOSP
NORTHVILLE MI 48167

DAVID W LINDNER MD
3800 WOODWARD 822
DETROIT MI 48201

LEONARD S LINKNER MD
12944 LA SALLE LANE
HUNTINGTON WOODS MI 48070

HERMAN J LINN MD
1420 ST ANTOINE
DETROIT MI 48226

STANLEY L LIPINSKI MD
7540 MICHIGAN AVE
DETROIT MI 48210

EZRA LIPKIN MD L
14150 VICTORIA
OAK PARK MI 48237

CARL E LIPNIK MD
31610 PLYMOUTH RD
LIVONIA MI 48150

MORRIS J LIPNIK MD
17000 W EIGHT MILE
SOUTHFIELD MI 48075

FLOYD H LIPPA MD
3815 PELHAM RD
DEARBORN MI 48124

DAVID I LIPSCHUTZ MD
17000 W 8 MILE RD
SOUTHFIELD MI 48075

LOUIS S LIPSCHUTZ MD A
2243 GOLFVIEW DR #205
TROY MI 48084

CHANNING T LIPSON MD
20101 JAMES COUZENS
DETROIT MI 48235

MADELEINE L LIPSON MD
1800 TUXEDO
DETROIT MI 48206

RAYMOND F LIPTON MD
10 PETERBORO ST
DETROIT MI 48201

JAMES W LITTLE MD
3637 FRANKLIN RD
BLOOMFIELD HILLS MI 48013

JACK A LITWIN MD
22341 W 8 MILE RD
DETROIT MI 48219

D J LITZENBERGER MD
2429 OAKWOOD
MELVINDALE MI 48127

BENITO C LIU MD
60 W HANCOCK
DETROIT MI 48201

W C LIVINGSTON MD
12901 W 7 MILE RD
DETROIT MI 48235

CLARENCE S LIVINGOOD
345 UNIVERSITY
GROSSE PTE MI 48236

JAMES R LLOYD MD
1515 DAV WHITNEY BLDG
DETROIT MI 48226

EDWARD C LOCKHART MD
7569 TIREMAN
DETROIT MI 48204

JAMES E LOFSTROM MD R
2220 CALLE P FIERRE
PALM SPRINGS CA 92262

ANNIE B LOGRIPPO MD A
36 RIDGE ROAD
PLEASANT RIDGE MI 48069

CARL W LOHMANN MD
933 DAV WHITNEY BLDG
DETROIT MI 48226

BERTON L LONDON MD
18510 MEYERS
DETROIT MI 48235

JAVIER H LONDONO MD A
171 HARRISON
BOSTON MA 02111

SALVATURE LONGO MD
468 CADIEUX
DETROIT MI 48230

JOHN L LOOMIS MD
236 VISGER RD
RIVER ROUGE MI 48218

GERALD N LOOMUS MD
4100 W MCNICHOLS
DETROIT MI 48221

REUBEN LOPATIN MD
2421 MONROE BLVD C
DEARBORN MI 48124

RODOLFO LOPEZ MD
1429 DAV WHITNEY BLDG
DETROIT MI 48226

C B P LORANGER MD L
20825 MACK
DETROIT MI 48236

JOS H LORBER MD
873 LAKEWOOD AVE
DETROIT MI 48215

EDWIN H LORENTZEN MD L
11702 GRAND RIVER AVE
DETROIT MI 48204

RODOLFO B LORENZO MD
1151 TAYLOR
DETROIT MI 48202

WM S LOVAS MD
500 THE ESPLANADE #304
VENICE FLA 33595

DONALD M LOVE MD
32665 UTICA
FRASER MI 48026

JAMES M LOVE MD
P O BOX 157
QUINNESEC MI 49876

ADOLF W LOWE MD
3338 W DAVISON AVE
DETROIT MI 48238

PAUL L LOWINGER MD
2170 IROQUOIS
DETROIT MI 48214

ELLIOT D LUBY MD
4467 STONY RIVER DR
BIRMINGHAM MI 48010

CHARLES E LUCAS MD
DETROIT GENERAL HOSP
DETROIT MI 48226

ROBERT J LUCAS MD
771 FISHER BLDG
DETROIT MI 48202

ALFRED H F LUI MD
WAYNE CO GEN HOSPITAL
ELOISE MI 48132

PAULINO R LUNA MD
10151 MICHIGAN AVE
DEARBORN MI 48126

JOHN G LUMPKIN JR MD
3800 WOODWARD AVE #418
DETROIT MI 48201

TENNIE M LUNCEFORD MD
EASTLAND PROF BLDG#452
DETROIT MI 48225

EARL F LUTZ MD R
2920 N E 55TH ST
FT LAUDERDALE FL 33308

SHERWIN J LUTZ MD
15121 W MCNICHOLS
DETROIT MI 48235

DENIS A LUZ MD
BON SECOURS HOSPITAL
GROSSE PTE MI 48236

JOHN H LUZADRE MD
18430 MACK AVE
DETROIT MI 48236

DAVID H LYNN MD R
LYNN HOSPITAL
LINCOLN PARK MI 48146

HARVEY D LYNN MD
3815 PELHAM RD
DEARBORN MI 48124

ROBT P LYTLE MD
402 NORTHLAND MED BLDG
SOUTHFIELD MI 48075

HAYWARD C MABEN JR MD
554 FISHER BLDG
DETROIT MI 48202

JOHN D MABLEY MD L
404 DAVID WHITNEY BLDG
DETROIT MI 48226

ORRIN P MAC DOUGALL MD A
18914 PINEHURST
DETROIT MI 48204

HOWARD W MACFARLANE MD L
1553 WOODWARD AVE
DETROIT MI 48226

HAROLD C MACK MD L
3800 WOODWARD #512
DETROIT MI 48201

ROBERT E MACK MD
WOMANS HOSPITAL
DETROIT MI 48201

IAN D MACKAY MD
3800 WOODWARD AVE
DETROIT MI 48201

EARLE D MAC KENZIE MD L
81 E KIRBY ST
DETROIT MI 48202

WM G MACKERSIE MD L
23237 PROVIDENCE DR
SOUTHFIELD MI 48075

CHARLES W MAC LEOD MD
16345 W MC NICHOLS
DETROIT MI 48235

FRANCIS B MACMILLAN MD L
1553 WOODWARD AVE
DETROIT MI 48226

K C MAC PHERSON MD L
8100 E JEFFERSON
DETROIT MI 48214

MALCOLM D MAC QUEEN MD L
660 WOODWARD AVE
DETROIT MI 48226

RAMON A MADRID MD
10151 MICHIGAN AVE
DEARBORN MI 48126

RALPH C MAGNELL MD
20100 W MCNICHOLS RD
DETROIT MI 48219

CLARENCE E MAGUIRE MD
1553 WOODWARD AVE
DETROIT MI 48226

BIRESH C MAHANTI MD
2300 OAK ST
WYANDOTTE MI 48192

MURRAY S MAHLIN MD
16820 GREENFIELD AVE
DETROIT MI 48235

HUGH M MAHONEY MD
1553 WOODWARD AVE
DETROIT MI 48226

FREDK P MAIBAUER MD
2934 BIDDLE AVE
WYANDOTTE MI 48192

ROSSER L MAINWARING MD
18101 OAKWOOD BLVD
DEARBORN MI 48123

EDWARD D MAIRE MD L
15224 E JEFFERSON
DETROIT MI 48230

HARRY MAISEL MD A
WAYNE STATE UNIV
STUDENT AFFAIRS
1401 RIVARD
DETROIT MI 48207

RUTH J MAITLAND MD
MICH BELL TELEPHONE
DETROIT MI 48226

V E MAJAUSKAS MD
23738 JOY RD
DETROIT MI 48239

AHMAD J MAJZOUB MD
3334 FORT
LINCOLN PARK MI 48146

HARI N MALIK MD
1400 CHRYSLER EXPWY
DETROIT MI 48207

JOSEPH M MALIN JR MD
DETROIT GENERAL HOSP
DETROIT MI 48226

FRANK J MALJE MD
6033 MIDDLEBELT
GARDEN CITY MI 48135

JOHN M MALONE MD
27970 ORCHARD LAKE RD
FARMINGTON MI 48024

ROBERT E MALONE MD
15101 SOUTHFIELD
ALLEN PARK MI 48101

JOHN A MALONEY MD L
670 MACCABEES BLDG
DETROIT MI 48202

PHILIP J MALONEY MD
16401 GRAND RIVER
DETROIT MI 48227

JOS H MALTZER MD
26505 JOHN R
MADISON HGHTS MI 48071

BERNARD T MAMMEL MD
14447 W SEVEN MILE RD
DETROIT MI 48235

VINCENT S MANCUSO MD L
611 S W 38TH AVE
FT LAUDERDALE FL 33312

B MANDELBAUM MD
432 E HANCOCK
DETROIT MI 48201

LESLIE MANDEL MD
26750 GRAND RIVER
DETROIT MI 48240

GERALD H MANDELL MD
SINAI HOSPITAL
DETROIT MI 48235

JACK N MANDIBERG MD
22341 W EIGHT MILE RD
DETROIT MI 48219

M MANGKORNKANOK MD A
WAYNE STATE UNIV
DETROIT MI 48207

HARI B MANKANI MD
2000 SECOND AVE
DETROIT MI 48226

ANDREW D MANN MD
20901 MOROSS
DETROIT MI 48236

MOREY H MANNING MD
950 E STATE FAIR AVE
DETROIT MI 48203

GORDON MANSON MD
HENRY FORD HOSP
DETROIT MI 48202

ALBERTO MANZOR MD
3800 WOODWARD #1202
DETROIT MI 48201

KENNETH E MAPLETOFT MD
420 MOHAWK
DEARBORN MI 48124

ANDREAS MARCOTTY MD
28035 SOUTHFIELD RD
LATHRUP VILLAGE MI 48075

EDWIN L MARCUS MD
15101 SOUTHFIELD
ALLEN PARK MI 48101

VINCENT J MARECKI MD
10326 W WARREN
DEARBORN MI 48126

RAYMOND R MARGHERIO MD
3800 WOODWARD AVE
DETROIT MI 48201

MARVIN O MARGOLIS MD
18205 PARKSIDE
DETROIT MI 48221

SAUL Z MARGULES MD
22301 GREATER MACK
ST CLAIR SHORES MI 48080

CARLETON J MARINUS MD L
1037 DAV WHITNEY BLDG
DETROIT MI 48226

FEDERICO MARIONA MD
1554 TUXEDO
DETROIT MI 48206

JEROME MARK MD
513 DAVID WHITNEY BLDG
DETROIT MI 48226

ALEXANDER P MARKEY MD
15212 MICHIGAN AVE
DEARBORN MI 48126

FRANK R MARKEY MD
15212 MICHIGAN AVE
DEARBORN MI 48126

BEN MARKS MD
232 W GRAND RIVER AVE
DETROIT MI 48226

BERT W MARKS MD
8250 LINCOLN DR
HUNTINGTON WOODS MI 48070

ALTON R MARSH MD L
P O BOX 4
GOOD HART MI 49737

JAMES R MARSHALL MD L
14827 E JEFFERSON AVE
DETROIT MI 48215

J R MARSHALL JR MD
20160 MACK AVE
DETROIT MI 48236

J B MARTIN JR MD
449 E ELIZABETH ST
DETROIT MI 48201

LYNDLE R MARTIN MD
2000 SECOND BLVD
DETROIT MI 48226

PETER A MARTIN MD
857 FISHER BLDG
DETROIT MI 48202

WALTER MARTIN MD
13800 LIVERNOIS
DETROIT MI 48238

WILBUR C MARTIN MD
10401 W CHICAGO
DETROIT MI 48204

ANTHONY MARTINEZ MD
8226 HAMPTON RD
GROSSE ILE MI 48138

ALVARO MARTINEZ MD M
ROUTE 1 BOX 57
KEY LARGO FL 33037

PEDRO O MARTINEZ MD L
1439 BAGLEY AVE
DETROIT MI 48216

E S MARTINOVSKY MD
NORTHVILLE STATE HOSP
NORTHVILLE MI 48167

EDGAR E MARTMER MD R
6935 CURTIS DR
COLOMA MI 49038

THOS B MARWIL MD
21751 W 11 MILE RD
SOUTHFIELD MI 48075

ROBERT C MARVIN MD
22362 MORLEY
DEARBORN MI 48124

T A MASCARIN MD
18101 E WARREN
DETROIT MI 48224

DONALD D MASSE MD
3040 E 7 MILE RD
DETROIT MI 48234

BURTON V MATTHEWS MD
13724 W FORT ST
SOUTHGATE MI 48195

PAUL E MATTMAN MD
1500 SEMINOLE
DETROIT MI 48214

THEO M MATTSON MD
901 W GRAND BLVD
DETROIT MI 48208

EUGENE W MAUCH MD
15101 SOUTHFIELD
ALLEN PARK MI 48101

HARRY G MAUTHE MD
16859 POLLYANA DR
LIVONIA MI 48154

CARLOS MAX MD
18984 LIVERNOIS
DETROIT MI 48221

FREDK M MAYNARD MD
6828 PARK AVE
ALLEN PARK MI 48101

WILLIAM D MAYS MD
19737 CHEYENNE
DETROIT MI 48235

F N MAYWOOD MD
20840 VERNIER RD
HARPER WOODS MI 48236

GORDON S MC ALPINE MD L
1250 C TRAILWOOD PATH
BIRMINGHAM MI 48010

THOS J MC BRYAN MD
21420 HARPER
ST CLAIR SHORES MI 48080

LYMAN M MC BRYDE MD L
RICHARDS LANDING
ST JOSEPH ISLAND

ONTARIO CANADA

JAMES H MC CADIE MD
13700 WOODWARD AVE
HIGHLAND PARK MI 48203

MARION G MCCALL JR MD
8401 WOODWARD
DETROIT MI 48202

VIRGINIA MCCANDLESS MD
270 S MELBORN
DEARBORN MI 48124

R S MC CAUGHEY MD
3535 W 13 MILE RD
ROYAL OAK MI 48072

ROBT J MC CLELLAN MD
16345 W MCNICHOLS
DETROIT MI 48235

RACHEL MC CLELLAND MD
P O BOX 71 NE STATION
LIVONIA MI 48152

JAMES J MC CLENDON MD L
8401 WOODWARD
DETROIT MI 48202

WM R MC CLURE MD L
BOX 1498
BOYNTON BEACH FL 33435

C E MCCOLE MD
HENRY FORD HOSP
DETROIT MI 48202

CHAS W MC COLL MD
2025 FORD AVENUE
WYANDOTTE MI 48192

CLARKE M MC COLL MD L
31262 HUNTLEY SQ EAST
BIRMINGHAM MI 48009

JOHN H MCCOLLOUGH MD
3800 WOODWARD AVE
DETROIT MI 48201

E BERT MC COLLUM MD
20867 MACK
DETROIT MI 48236

CAREY P MC CORD MD L
SCH OF PUBLIC HEALTH
ANN ARBOR MI 48104

COLIN C MC CORMICK MD A
24352 ROCKFORD AVE
DEARBORN MI 48124

FRANK B MCCUE MD
7106 PARK AVE
ALLEN PARK MI 48101

L E MC CULLOUGH MD
1711 DAV WHITNEY BLDG
DETROIT MI 48226

ANGUS L MC DONALD MD L
81 MEADOW LANE
GROSSE PTE MI 48236

JOHN R MC DONALD MD
HARPER HOSP
DETROIT MI 48201

WM G MC DONALD MD
15600 MICHIGAN AVE
DEARBORN MI 48126

WM G MC EVITT MD
1140 W BOSTON BLVD
DETROIT MI 48202

T MANFORD MCGEE MD
22000 GREENFIELD
OAK PARK MI 48237

KENNETH D MCGINNIS MD
6071 W OUTER DR
DETROIT MI 48235

N D MC GLAUGHLIN MD
2312 BIDDLE AVE
WYANDOTTE MI 48192

JOS M MC GOUGH MD
18211 W TWELVE MILE
LATHRUP VILLAGE MI 48075

JOHN F MC GUIRE MD
3815 PELHAM
DEARBORN MI 48124

JOHN T MC HENRY MD
DEPT OF NEUROLOGY
HARPER HOSP
3825 BRUSH AVE
DETROIT MI 48201

C W MC INTOSH MD
8339 MACK AVE
DETROIT MI 48214

ROBT D MC INTOSH MD
21390 E RIVER RD
GROSSE ILE MI 48138

WM B MC INTYRE MD
20901 MOROSS RD
DETROIT MI 48236

G THOS MC KEAN MD
1553 WOODWARD AVE
DETROIT MI 48226

GEO E MC KEEVER MD
5237 OAKMAN BLVD
DEARBORN MI 48126

JAMES MCKENNA MD
573 FISHER BLDG
DETROIT MI 48202

CHAS J MC KENNA MD R
1295 SUNNINGDALE
GROSSE POINTE MI 48236

ROBT E MCKNIGHT MD
15901 W 9 MILE RD
SOUTHFIELD MI 48075

HARRIET I E MC LANE MD L
1367 NICOLET PLACE
DETROIT MI 48207

JAMES T MCLAUGHLIN MD
WYANDOTTE GEN HOSP
WYANDOTTE MI 48192

JASPER E MCLAURIN MD
5050 JOY RD
DETROIT MI 48204

BRITA R MC LEAN MD
1365 CASS
DETROIT MI 48226

DON W MC LEAN MD L
1066 FISHER BLDG
DETROIT MI 48202

DONALD C MC LEAN M D
459 FISHER BLDG
DETROIT MI 48202

I WM MCLEAN JR MD
PARKE DAVIS & CO
JOSEPH CAMPAU @ RIVER

DETROIT MI 48232

THOMAS V MCMANAMON MD
23470 MEADOW PARK
DETROIT MI 48239

JOSEPH M MC NAMARA MD
9430 S MAIN
PLYMOUTH MI 48170

ROGER F MC NEILL MD
63 KERCHEVAL
GROSSE PTE MI 48236

L J MCNICHOL MD
18424 W MCNICHOLS RD
DETROIT MI 48219

RODERICK T MC PHEE MD
14628 E 7 MILE RD
DETROIT MI 48205

MARK R MC QUIGGAN MD L
700 SEWARD APT 715
DETROIT MI 48202

THELMA H MCQUIGGAN MD
125 N MILITARY
DETROIT MI 48124

JOSEPH F MEARA MD
DETROIT MEM HOSP
DETROIT MI 48226

GIL H MEDIODIA MD
22912 CANTERBURY
ST CLAIR SHORES MI 48080

STUART F MEEK MD
19431 VAN DYKE
DETROIT MI 48234

R J MEHDIABADI MD A
WAYNE STATE UNIVERSITY
DETROIT MI 48207

L W MELANDER JR MD
1229 DAVID WHITNEY BDG
DETROIT MI 48226

HYMAN S MELLEN MD
16800 GREENFIELD
DETROIT MI 48235

RAYMOND C MELLINGER MD
959 PEMBERTON
GROSSE PTE MI 48236

MAXIM P MELNIK MD
3011 W GRAND BLVD
DETROIT MI 48202

NESTOR MELNYCZUK MD
19600 W WARREN
DETROIT MI 48228

RICHARD MENCZER MD
29081 DEQUINDRE
MADISON HEIGHTS MI 48071

HERBERT MENDELSON MD
24508 LAFAYETTE CIRCLE
SOUTHFIELD MI 48075

LAWRENCE MENDELSOHN MD
10601 W SEVEN MILE RD
DETROIT MI 48221

R J MENDELSSOHN MD
8100 E JEFFERSON AVE
DETROIT MI 48214

EDGAR V MENDIANS MD R
9486 BEACONSFIELD
DETROIT MI 48224

SAMUEL MENDOZA MD
14515 FORD RD
DEARBORN MI 48126

NORMAN J MENTON M D
15300 W MCNICHOLS
DETROIT MI 48235

RODOLFO S MERCADER MD
30900 FORD RD
GARDEN CITY MI 48135

CHAS C MERKEL MD L
85 KERCHEVAL AVE
GROSSE PTE FARMS MI 48236

KARL MERKLE M D
530 N TELEGRAPH
DEARBORN MI 48128

C R MERRILL JR MD
1951 MONROE
DEARBORN MI 48124

EARL G MERRITT MD L
3800 WOODWARD AVE
DETROIT MI 48201

JOHN S METES MD
62 WEBBER PL
GROSSE PTE SHORES MI 48236

KENNETH R MEYER MD
OAKWOOD HOSP
DEARBORN MI 48124

MARJORIE P MEYERS M D
3790 WOODWARD
DETROIT MI 48201

MAURICE P MEYERS MD
23195 RIVERSIDE DR
SOUTHFIELD MI 48075

CLEON M MICHAEL MD
32300 SCHOOLCRAFT
LIVONIA MI 48150

MICHAEL J MICHAEL MD
15901 W 9 MILE RD #400
SOUTHFIELD MI 48075

ELWIN W MIDGLEY MD
60 W HANCOCK
DETROIT MI 48201

DAVID MIGDOLL MD
15361 PLYMOUTH RD
DETROIT MI 48227

BENJAMIN MIHAY M D
2021 MONROE
DEARBORN MI 48124

W B MIKESELL JR MD
23611 GODDARD
TAYLOR MI 48180

GEORGE MIKHAIL MD
HENRY FORD HOSP
DETROIT MI 48202

LEWIS H MILBURN MD
3800 WOODWARD AVE
DETROIT MI 48201

VYTAUTAS MILERIS MD
2730 E JEFFERSON AVE
DETROIT MI 48207

HUGH H MILEY MD
WAYNE COUNTY GEN HOSP
ELOISE MI 48132

GLENN E MILLARD MD
958 FISHER BLDG
DETROIT MI 48202

ANTONINA MILLER MD
16989 FARMINGTON
LIVONIA MI 48154

DANL H MILLER MD
23100 CHERRY HILL
DEARBORN MI 48124

ELMER B MILLER MD
7 JOHN GLENN PLACE
HIGHLAND PARK MI 48203

JACOB J MILLER MD
20131 JAMES COUZENS
DETROIT MI 48235

J MARTIN MILLER MD
2799 W GRAND BLVD
DETROIT MI 48202

KARL L MILLER MD
1553 WOODWARD AVE
DETROIT MI 48226

MYRON H MILLER MD L
27330 SOUTHFIELD RD
LATHRUP VILLAGE MI 48075

OSCAR W MILLER MD
FLEETWOOD PLT FBD GMC
DETROIT MI 48209

THOS H MILLER MD L
3031 IROQUOIS AVE
DETROIT MI 48214

WM E MILLER MD L
361 MERTON RD
DETROIT MI 48203

WILLIAM J MILLER M D
5649 INKSTER RD
GARDEN CITY MI 48135

CLINTON C MILLS MD L
13938 SARASOTA
DETROIT MI 48239

GEO R MILLS MD
8209 ALLEN ROAD
ALLEN PARK MI 48101

SAMUEL B MILTON MD
234 VISGER
RIVER ROUGE MI 48218

BYONG G MIN MD
198 S GRATIOT
MT CLEMENS MI 48043

EDWARD I MINTZ MD R

MORRIS J MINTZ MD
23077 GREENFIELD #261
SOUTHFIELD MI 48075

MORTEZA MINUI MD
1576 KIRKWAY DR
BLOOMFIELD HILLS MI 48013

JOHN MINYE MD
6014 WEST FORT ST
DETROIT MI 48209

SOPHIE MISHELEVICH MD L
4651 E NINE MILE RD
WARREN MI 48091

MARTYNA MISKINIS MD
393 W GRAND BLVD
DETROIT MI 48216

D K MISRA MD
828 FISHER BLDG
DETROIT MI 48202

SUDARSAN MISRA MD
1400 CHRYSLER EXPWY
DETROIT MI 48207

EDWARD MISSAVAGE JR MD
WAYNE CO GENL HOSP
ELOISE MI 48132

A W MITCHELL M D
12000 VISGER
DETROIT MI 48217

C LESLIE MITCHELL MD R
1772 LAJOLLA RANCHO RD
LA JOLLA CA 92037

DARNELL P MITCHELL MD
8401 WOODWARD AVE
DETROIT MI 48202

OSCAR C MITCHELL MD
3400 W WARREN
DETROIT MI 48208

ROY A MITCHELL MD
1992 ARDMORE RD
TRENTON MI 48183

ROBT C MOEHLIG MD L
964 FISHER BLDG
DETROIT MI 48202

KAMRAN S MOGHISSI MD
3800 WOODWARD AVE

502 PROFESSIONAL PLAZA
DETROIT MI 48201

GEO MOGILL MD
26321 WOODWARD
HUNTINGTON WOODS MI 48070

JAHANGIR MOHTADI MD
302 W MAIN ST
NORTHVILLE MI 48167

VASIL P MOISIDES MD L
28 W ADAMS AVE
DETROIT MI 48226

MILA A MOJARES MD
DETROIT GENERAL HOSP
DETROIT MI 48226

HOWARD MOLITZ MD A
OPHTHALMOLOGY DEPT
DETROIT GENERAL HOSP

DETROIT MI 48226

CLARENCE D MOLL MD L
2368 HARRISON DR
DUNEDIN FL 33528

STEPHEN K MOLNAR MD
4525 S TELEGRAPH RD
DEARBORN MI 48125

BOXIDAR MOMCILOVICH MD
2241 HURON RIVER DR
ROCKWOOD MI 48173

E MONGE-ST LAURENT MD
23607 FARMINGTON RD
FARMINGTON MI 48024

ROBT C MONSON MD
17520 CHESTER
DETROIT MI 48224

JOS R MONTANTE MD
3040 MIDDLEBELT RD
ORCHARD LAKE MI 48033

MILTON MONTENEGRO MD
16633 GOLFVIEW
LIVONIA MI 48154

WM C MONTGOMERY MD
6071 W OUTER DR
DETROIT MI 48235

RAYMOND W MONTO MD
HENRY FORD HOSP
DETROIT MI 48202

GERALD A MOORE MD
801 DAV WHITNEY BLDG
DETROIT MI 48226

JOHN W MOORE JR MD
8251 W 8 MILE RD
DETROIT MI 48221

THOMAS F MOORE MD A
2921 BAMLET ROAD
ROYAL OAK MI 48073

WESLEY P MOORE MD
HENRY FORD HOSPITAL
DETROIT MI 48202

WARREN R MOORE MD
17800 E 8 MILE RD
DETROIT MI 48236

COLEMAN MOPPER MD
14633 E SEVEN MILE RD
DETROIT MI 48205

MIRIAM V MORALES MD
5495 W 12TH LANE
HIALEAH FLORIDA 33012

FRANK J MORAN MD
16311 MIDDLEBELT
LIVONIA MI 48154

DONALD N MORGAN MD
326 EASTLAND CENTER
PROFESSIONAL BLDG
HARPER WOODS MI 48225

GEO J MORIARTY MD
3011 W GRAND BLVD
DETROIT MI 48202

YOSHIKAZU MORITA MD
3535 W 13 MILE RD
ROYAL OAK MI 48072

ARTHUR R MORLEY MD
9645 ISLAND DR
GROSSE ILE MI 48138

HAROLD V MORLEY MD
970 FISHER BLDG
DETROIT MI 48202

GEORGE M MORLEY MD
20211 ANN ARBOR TRAIL
DEARBORN HEIGHTS MI 48127

JAMES A MORLEY MD L
4200 WHITE BIRCH DR
ORCHARD LAKE MI 48033

THOMAS S MORLEY MD
4160 JOHN R ST
DETROIT MI 48201

SHEFFICK J MOROUN MD
675 PARKER
DETROIT MI 48214

MARVA J MORRIS MD
12632 DEXTER
DETROIT MI 48238

GEORGE W MORRISON MD L
2033 PARK
DETROIT MI 48226

WILLIAM H MORSE MD
26711 SOUTHFIELD
LATHRUP VILLAGE MI 48075

DAVID G MORTON MD
19445 PLYMOUTH
DETROIT MI 48228

FREDK L MOSELEY MD
2561 S SCHAEFER
DETROIT MI 48217

PETER F MOSER MD
26082 E HURON RIVER DR
FLAT ROCK MI 48134

JOHN W MOSES MD
MT CARMEL MERCY HOSP
6071 OUTER DR WEST
DETROIT MI 48235

NATHAN H MOSS M D L
2847 TRUMBULL
DETROIT MI 48216

NORMAN D MOSS MD
29519 MEADOWLANE DR
SOUTHFIELD MI 48075

SELMA S MOSS MD
20905 GREENFIELD
SOUTHFIELD MI 48075

CARLIN P MOTT MD L
2395 W GRAND BLVD
DETROIT MI 48208

JOHN W MOYNIHAN MD
2841 MONROE BLVD
DEARBORN MI 48124

HERSCHEL E MOZEN MD
17550 W 12 MILE RD
SOUTHFIELD MI 48075

JOHN MUCASEY M D
22341 W 8 MILE RD
DETROIT MI 48219

HECTOR L MULERO MD
15101 SOUTHFIELD RD
ALLEN PARK MI 48101

JOS R MULLEN MD
19003 ECORSE RD
ALLEN PARK MI 48101

HENRY T MUNSON MD
7815 E JEFFERSON
DETROIT MI 48214

GORDON M MURRAY MD
9901 WHITTIER
DETROIT MI 48224

IAN H L MURRAY MD
18161 W 12 MILE RD
LATHRUP VILLAGE MI 48075

PATRICK MURRAY MD
261 MACK AVE
DETROIT MI 48201

ROBT J MURRAY MD
3700 WEST RD
TRENTON MI 48183

PAUL H MUSKE MD
13244 W WARREN
DEARBORN MI 48126

KAORI K MUTLU MD
35337 W WARREN
WESTLAND MI 48185

JAROSLAW MUZ MD A
GRACE HOSPITAL
DETROIT MI 48201

DANL W MYERS MD
2243 GOLFVIEW DR #106
TROY MICHIGAN 48084

STEVEN A MYERS MD
951 E LAFAYETTE
DETROIT MI 48207

D P NACHAZEL JR MD
3800 WOODWARD AVE
DETROIT MI 48201

RUSSELL NAHIGIAN MD
17371 ANNCHESTER AVE
DETROIT MI 48219

ANTOINE NAHOUM MD
1030 KENSINGTON
DETROIT MI 48230

K C R NAIR MD
41001 W SEVEN MILE RD
NORTHVILLE MI 48167

SUNGHEE NAM MD
KIRWOOD HOSPITAL
DETROIT MI 48238

DEMETRIO N NASOL MD
20503 DEQUINDER
DETROIT MI 48234

EDWARD B NASH MD
2235 INKSTER ROAD
INKSTER MI 48141

ALBERT G NAULT JR MD
18101 E WARREN
DETROIT MI 48224

JOSEPH H NAUD MD
18241 GREENFIELD RD
DETROIT MI 48235

DOMINADOR G NAVALTA MD
3529 W JEFFERSON
ECORSE MI 48229

CORNELIUS A NAVORI MD
3516 FORT STREET
LINCOLN PARK MI 48146

ARTHUR H NAYLOR MD L
2220 N TIPSICO LK RD
MILFORD MI 48042

S G NAZARENO MD
18144 MULBERRY
RIVERVIEW MI 48192

WALTER G NEEB MD
16840 E WARREN ST
DETROIT MI 48224

JOHN M NEHRA MD
17800 E 8 MILE RD #412
GROSSE POINTE MI 48236

EDWIN J NEILL MD
5026 BEDFORD
DETROIT MI 48224

DARWIN M NELSON MD
63 RIDGE RD
DETROIT MI 48236

HARRY M NELSON MD L
1800 LULA LAKE RD
LOOKOUT MOUNTAIN TN 37350

NORMAN A NELSON MD
WAYNE CO GEN HOSP
ELOISE MI 48132

VICTOR E NELSON MD
3025 CROOKS RD
ROYAL OAK MI 48073

WARREN S NESBIT MD
24382 ROSS CT
DETROIT MI 48239

PAUL N NEUFELD MD
17000 W EIGHT MILE RD
SOUTHFIELD MI 48075

ERNEST NEWMAN MD R
17371 EVERGREEN ST
DETROIT MI 48219

GEO F NEWMAN MD
2012 MONROE BLVD
DEARBORN MI 48124

MAX K NEWMAN MD
21701 W 11 MILE RD
SOUTHFIELD MI 48075

KENNETH NEWTON MD
11841 SUSAN AVE
WARREN MI 48093

WALLACE NICHOLS JR MD
2387 ASHBY
TRENTON MI 48183

WARREN D NICKEL MD
21935 WILDWOOD
DEARBORN MI 48128

ALBERT W NICKELS MD
3535 W 13 MILE RD
ROYAL OAK MI 48072

AAGE E NIELSEN MD
3790 WOODWARD
DETROIT MI 48201

DONALD R NIELSEN MD
26339 WOODWARD AVE
HUNTINGTON WOODS MI 48070

NORMAN D NIGRO MD
3800 WOODWARD #508
DETROIT MI 48201

M H NILFOROUSHAN MD
16975 FARMINGTON RD
LIVONIA MI 48154

JOHN B NILL MD L
710 BERKSHIRE
GROSSE PTE PARK MI 48230

LUIS A NINO MD
25638 CHAPELWEIGH DR
FARMINGTON MI 48024

WM C NOBLE MD
4045 W JEFFERSON
ECORSE MI 48229

BERNARD E NOLAN MD
5460 SCHAEFER RD
DEARBORN MI 48126

DAVID C NOLAN MD
1151 TAYLOR RM 119C
DETROIT MI 48202

WILFRED S H NOLTING MD
15850 E WARREN AVE
DETROIT MI 48224

DAVID C NORTHCROSS MD
2929 W BOSTON BLVD
DETROIT MI 48206

ARTHUR B NORTON MD L
18615 MUIRLAND
DETROIT MI 48221

MARTIN L NORTON MD
17125 MT VERNON BLVD
SOUTHFIELD MI 48075

WM C NOSHAY MD
2799 W GRAND BLVD
DETROIT MI 48202

K S NOWAKOWSKI MD
15125 GRATIOT
DETROIT MI 48205

KENNETH M NOWICKI MD
HUTZEL HOSPITAL
DETROIT MI 48201

C NWOKEDI MD
12000 VISGER RD
DETROIT MI 48217

VICTOR J NYBOER MD
261 MACK BLVD
DETROIT MI 48201

LEON S OBUSHKEVICH MD
5460 SCHAEFER RD
DEARBORN MI 48124

LONIE B OCOOL MD
1449 DAV WHITNEY BLDG
DETROIT MI 48226

KATHERYN L O CONNOR MD
17711 SCHOOLCRAFT
DETROIT MI 48227

DAYTON H O DONNELL MD
22000 GREENFIELD
DETROIT MI 48237

KEVIN T O DONNELL MD
15901 W 9 MILE RD #514
SOUTHFIELD MI 48075

EDWARD M OETTING M D
1041 WHITTIER
GROSSE PTE MI 48236

GILBERT M O GAWA MD
HENRY FORD HOSP
DETROIT MI 48202

JORDON OHL MD
SINAI HOSPITAL
DETROIT MI 48235

GALEN B OHMART MD L
275 GILCHRIST AVE
ALPENA MI 49707

JULIUS M OHORODNIK MD
21520 GOETHE AVE
GROSSE PTE WOODS MI 48236

MILTON H OKUN MD N
SCARBOROUGH MANOR #307
SCARBOROUGH N Y 10510

JOSEPH R OLDFORD MD
17000 W 8 MILE RD
SOUTHFIELD MI 48075

STANLEY OLEJNICZAK MD
WAYNE COUNTY GEN HOSP
ELOISE MI 48132

ALEX OLEN MD
13100 HARPER AVE
DETROIT MI 48213

FRANCIS P O LINN MD
18430 MACK AVE
GROSSE PTE FARMS MI 48236

GEO S OLMSTED MD
17550 W 12 MILE RD
SOUTHFIELD MI 48075

AVIS M OLSON M D
MT CARMEL MERCY HOSP
DETROIT MI 48235

DONALD T OLSON MD
17701 W MCNICHOLS RD
DETROIT MI 48235

GEORGE P OLSON MD
7900 JOSEPH CAMPAU
HAMTRAMCK MI 48212

JAMES A OLSON MD
17000 WEST 8 MILE RD
SOUTHFIELD MI 48075

GARY R O NEIL MD
DETROIT MEMORIAL HOSP
DETROIT MI 48226

JOS M OPPENHEIM MD
24091 DANTE
OAK PARK MI 48237

RICHARD S OPPENHEIM MD A
KRESGE EYE INSTITUTE
690 MULLETT ST

DETROIT MI 48226

HASAN Y ORGE MD A
951 E LAFAYETTE
DETROIT MI 48207

RANDALL M O ROURKE MD L
8465 KENNEDY CIRCLE
WARREN MI 48093

ARMANDO ORTIZ MD
15990 W NINE MILE RD
SOUTHFIELD MI 48075

EUGENE A OSIUS MD L
901 DAV WHITNEY BLDG
DETROIT MI 48226

ARTHUR Z OSTROWSKI MD
610 NORTHLAND MED BLDG
SOUTHFIELD MI 48075

EUGENE A OTLEWSKI MD
15901 W 9 MILE RD
SOUTHFIELD MI 48075

JORGE V OTTAVIANO MD
41001 W SEVEN MILE
NORTHVILLE MI 48167

JOHN P OTTAWAY MD
18226 MACK AVE
GROSSE PTE FARMS MI 48236

DONALD OTTO MD
DET MEMORIAL HOSPITAL
DETROIT MI 48226

CLARENCE I OWEN MD L
2689 DUPONT
JACKSONVILLE FL 32217

S S PADILLA JR MD A
305 S DELSEA
DEPTFORD N J 08096

ARTEMIO E PACQUING MD
25219 GRAND RIVER
DETROIT MI 48240

A G PAGDANGANAN MD
HARPER HOSPITAL
DETROIT MI 48201

MILTON R PALMER MD
3800 WOODWARD AVE #218
DETROIT MI 48201

PETER PALMER MD
13479 NORTHLINE
SOUTHGATE MI 48195

I J PALMISANO MD
32300 SCHOOLCRAFT
LIVONIA MI 48150

TAMARA PANCZAK MD
PLYMOUTH STATE HOSP
NORTHVILLE MI 48167

NANA N PANTOS MD
17800 E 8 MILE RD
DETROIT MI 48236

STEPHEN M PANIC MD
28091 DEQUINDRE
MADISON HEIGHTS MI 48071

THEO G PANTOS MD
1536 DAV WHITNEY BLDG
DETROIT MI 48226

HELEN A PAPAIOANOU MD
20361 MACK AVE
DETROIT MI 48236

BENJ R PARKER MD
19149 W SEVEN MILE RD
DETROIT MI 48219

BRUCE R PARKER MD A
STANFORD UNIV MED CTR
DEPT OF RADIOLOGY

STANFORD CALIF 94304

JOHN W PARNELL MD
21 WHITCOMB DR
GROSSE PTE FARMS MI 48236

ROBT W PARR MD A
109 CRESTWOOD LANE
LARGO FL 33540

RUFUS H PARRISH MD
8401 WOODWARD AVE
DETROIT MI 48202

BENJAMIN A PASSOS MD
P O BOX 1266A
DETROIT MI 48232

MELVIN K PASTORIUS MD
22835 WILSON
DEARBORN MI 48128

ROY B PATTON MD
665 WINTER ST
SALEM OREGON 97301

LLOYD J PAUL MD
19321 GREENFIELD
DETROIT MI 48235

JEROME I PAWLOWSKI MD L
2009 E GRAND BLVD
DETROIT MI 48211

WALTER A PAYNE JR MD
283 HILLCREST
GROSSE POINTE MI 48236

HARRY A PAYSNER MD L
13105 IXORA COURT
NORTH MIAMI FL 33161

EDWIN T PEARCE JR MD
14411 E JEFFERSON
DETROIT MI 48215

JACK PEARLMAN MD
25860 CONCORD
HUNTINGTON WOODS MI 48070

HARRY A PEARSE MD L
17000 W EIGHT MILE
SOUTHFIELD MI 48075

HERBERT E PEDERSEN MD
3815 PELHAM RD
DEARBORN MI 48124

GEO F PEGGS MD
5419 LIVERNOIS AVE
DETROIT MI 48210

LUZVIMINDA PENALOZA MD
CHILDRENS HOSPITAL
DETROIT MI 48202

GEO V PENDY MD
1001 DAV WHITNEY BLDG
DETROIT MI 48226

JOHN M PENDY MD
1001 DAVID WHITNEY BL
DETROIT MI 48226

DAVID A PENNER MD
18530 GRAND RIVER
DETROIT MI 48223

MEYER PENSLER MD
10151 MICHIGAN AVE
DEARBORN MI 48126

DONALD F PERCY MD
15901 GREENFIELD AVE
DETROIT MI 48227

GRACE M PERDUE MD R
1438 S OCEAN BLVD #7
POMPANO BEACH FL 33062

JOSE L PEREZ MD
2799 ORCHARD TRAIL
TROY MI 48084

CARLOS PEREZ-BORJA MD
11885 E TWELVE MILE RD
WARREN MI 48093

RENE PEREZ-TERAN MD
13326 SHERWOOD
HUNTINGTON WOODS MI 48070

CLINTON J PERINI MD A
WAYNE STATE UNIVERSITY
DETROIT MI 48207

FRANK S PERKIN MD L
828 FISHER BLDG
DETROIT MI 48202

HYMAN L PERLIS MD L
10 PETERBORO
DETROIT MI 48201

MARVIN S PERLIS M D
1030 FISHER BLDG
DETROIT MI 48202

HAROLD PERRY MD
SINAI HOSP
DETROIT MI 48235

JOSEPH H PERRY MD
259 LEWISTON RD
GROSSE PTE MI 48236

CLAUS PETERMANN MD
20927 KELLY RD
E DETROIT MI 48021

WM R PETERS MD
670 PEACH TREE
GROSSE PTE MI 48236

GUSTAV PETERSON MD
FISHER BODY WILLOW RUN
YPSILANTI MI 48197

ROBERT A PETERSON MD
18700 MEYERS RD
DETROIT MI 48235

RONALD D PETERSON MD
FORD MOTOR CO
DEARBORN MI 48121

SAMUEL C PETIX MD
17640 W 12 MILE RD
SOUTHFIELD MI 48075

EDWARD A PETOSKEY MD
5656 W FORT
DETROIT MI 48209

THOS J PETRICK MD
15101 SOUTHFIELD
ALLEN PARK MI 48101

ANTHONY PETRILLI MD
951 E LAFAYETTE
DETROIT MI 48207

MARIO A PETRINI M D
1080 FISHER BLDG
DETROIT MI 48202

LOUIS A PETRUCCO MD
14044 W MCNICHOLS RD
DETROIT MI 48235

THOS A PETTY MD
17300 E JEFFERSON AVE
GROSSE PTE MI 48236

ARTHUR JOHN PETZ MD
36000 FIVE MILE RD
LIVONIA MI 48154

THOMAS J PETZ MD
605 DAV WHITNEY BLDG
DETROIT MI 48226

PHILIP S PEVEN MD
18709 MEYERS RD
DETROIT MI 48235

JOS D PICARD MD
5237 OAKMAN BLVD
DEARBORN MI 48126

LOUISA I PICCONE MD
17700 W WARREN
DETROIT MI 48228

J WALTON PICHETTE MD
6650 GREENFIELD RD
DEARBORN MI 48126

ORLANDO W PICKARD MD L
4676 BERKSHIRE RD
DETROIT MI 48224

SOL O PICKARD MD
HENRY FORD HOSPITAL
DETROIT MI 48202

L M PICKERING MD
13479 NORTHLINE
SOUTHGATE MI 48195

JAMES M PIERCE JR MD
3800 WOODWARD AVE
DETROIT MI 48201

A W PIETRA MD L
1750 VERNIER RD #27
GROSSE POINTE MI 48236

LEONARD R PIGGOTT MD
951 E LAFAYETTE
DETROIT MI 48207

JOHN T PILIGIAN MD
3825 BRUSH ST
DETROIT MI 48201

JAMES F PINGEL MD
998 NORFOLK
BIRMINGHAM MI 48009

RALPH H PINO MD L
31841 KINGSWOOD SQ
FARMINGTON MI 48024

RALPH R PIPER MD L
1495 MC KINSTRY
DETROIT MI 48209

JOHN E PITTMAN MD L
1553 WOODWARD AVE
DETROIT MI 48226

CAROL K PLATZ MD
20631 BALFOUR
HARPER WOODS MI 48225

HERMAN M PLAVNICK MD A
5005 VAN BUREN ST
HOLLYWOOD FL 33021

HAROLD PLISKOW MD
15901 W 9 MILE RD #202
SOUTHFIELD MI 48075

HAROLD PLOTNICK M D
18654 MUIRLAND
DETROIT MI 48221

EUGENE I PLOUS MD
569 FISHER BLDG
DETROIT MI 48202

HAROLD M PODOLSKY MD
3755 FORT
LINCOLN PARK MI 48146

A POGREBNIAK MD
25210 GRAND RIVER
DETROIT MI 48240

SENTA V POIM MD
1069 FISHER BLDG
DETROIT MI 48202

ROBERT T POLACK MD
24425 HOOVER
WARREN MI 48089

CHAS P POLENTZ MD
31815 SOUTHFIELD
BIRMINGHAM MI 48009

JOHN E POLK MD
8721 12TH ST
DETROIT MI 48206

JEROME L POLLACK MD
15615 CRESCENT DR
ALLEN PARK MI 48101

JOHN J POLLACK MD
3901 BEAUBIEN
DETROIT MI 48201

R J POLLARD MD
GRACE HOSP
DETROIT MI 48201

LOUIS S POLLENS MD
15421 W 9 MILE RD
OAK PARK MI 48237

CLEMENT J POLLINA MD
21420 HARPER
ST CLAIR SHORES MI 48080

JOS L PONKA MD
2799 W GRAND BLVD
DETROIT MI 48202

WALTER O PODL MD
20901 MOROSS RD
DETROIT MI 48236

SONJAI POONPANIJ MD
15231 W SEVEN MILE RD
DETROIT MI 48235

KEO POOPAT MD A
WAYNE STATE UNIV
DETROIT MI 48207

GERALD POPE MD
HENRY FORD HOSP
DETROIT MI 48202

CHAS A PORRETTA MD
507 NORTHLAND MED BLDG
SOUTHFIELD MI 48075

FRANCIS S PORRETTA MD L
18591 SARATOGA BLVD
LATHRUP VILLAGE MI 48075

GEORGE F PORRETTA MD
23077 GREENFIELD
SOUTHFIELD MI 48075

FREDK G PORTER MD
29590 FIVE MILE
LIVONIA MI 48154

HARRY PORTNOY MD R
24710 SUSSEX AVE
DETROIT MI 48237

JOS L POSCH MD
1408 KALES BLDG
DETROIT MI 48226

IRVING POSNER MD
18111 MUIRLAND AVE
DETROIT MI 48235

ELIHUE B POTTS MD
7404 DEXTER
DETROIT MI 48206

JOSEPH T POWASER MD
26904 WILSON DR
DEARBORN HEIGHTS MI 48127

LAWRENCE POWER MD
1400 CHRYSLER EXPWY
DETROIT MI 48207

JOHN R PRACHER MD
3815 PELHAM RD
DEARBORN MI 48124

PREM S PRASAD MD
32900 FIVE MILE RD
LIVONIA MI 48154

ANANDA S PRASAD MD
WAYNE STATE UNIVERSITY
DETROIT MI 48207

JEAN P PRATT MD L
2608 N E 21ST COURT
FT LAUDERDALE FL 33305

LAWRENCE A PRATT MD A
US AID PH E APO
SAN FRANCISCO CA 96243

C PREDETEANU MD
810 DAV WHITNEY BLDG
DETROIT MI 48226

RUTH E PRESTON MD
3011 W GRAND BLVD
DETROIT MI 48202

A HAZEN PRICE MD L
18605 BIRCHCREST AVE
DETROIT MI 48221

ALVIN E PRICE MD L
1553 WOODWARD AVE
DETROIT MI 48226

SCOTT K PRICE MD
OAKWOOD HOSP
DEARBORN MI 48124

ROBT J PRIEST MD
HENRY FORD HOSP
DETROIT MI 48202

ADDISON E PRINCE MD
8942 DEXTER
DETROIT MI 48206

EDWARD J PRISBE MD
16603 PLYMOUTH RD
DETROIT MI 48227

JULIEN PRIVER MD
6767 W OUTER DR
DETROIT MI 48235

A B PROCAILO MD
6033 MIDDLEBELT RD
GARDEN CITY MI 48135

LORNE D PROCTOR MD
19515 MACK AVE
GROSSE PTE WOODS MI 48236

FRANK P PROKOP MD
12740 S MARROW ST
DEARBORN MI 48126

V PROKOPOWYCZ MD
19666 CONANT
DETROIT MI 48234

RUSSEL F PROUD MD
26151 HURON RIVER DR
FLAT ROCK MI 48134

A MICHAEL PRUS MD
4160 JOHN R STREET
DETROIT MI 48201

SIDNEY PRYSTOWSKY MD
1800 TUXEDO
DETROIT MI 48206

THOM J PRZYBYLSKI MD
770 FISHER BLDG
DETROIT MI 48202

ANDRE PUGEL MD
VET ADMIN HOSP
ALLEN PARK MI 48101

JOSEPHINE PUGEL MD
918 HOLLYWOOD
GROSSE PTE WOODS MI 48236

HOWARD C PUGH MD
1553 WOODWARD AVE
DETROIT MI 48226

BENEDETTO PUGLIESI MD L
21811 KELLY RD
EAST DETROIT MI 48021

FRANK H PURCELL MD L
869 EDGEMONT PARK
DETROIT MI 48230

PRITPAL S PURI MD
WAYNE STATE UNIV
DETROIT MI 48207

HENRY E PURO M D
1733 TRENTON DR
TRENTON MI 48183

STEWART E PURSEL MD
1016 PROF PLAZA
DETROIT MI 48201

W L PURVES M D
17595 PARKSIDE
DETROIT MI 48221

SEONG KYUN PYUN MD
2003 WICKFORD CT
BLOOMFIELD HILLS MI 48013

RICHARD G QUEVY MD
29290 CHENWOOD CT
FARMINGTON MI 48024

EUGENE H QUIGLEY MD
635 N GULLEY
DEARBORN HGHTS MI 48127

WM G QUIGLEY MD A
16210 W NINE MILE RD
SOUTHFIELD MI 48075

EDWARD L QUINN MD
1141 GOLFVIEW
BIRMINGHAM MI 48009

RAFAEL E QUINONES MD
17200 E WARREN
DETROIT MI 48224

MOHAMMED RABBANI MD
1400 CHRYSLER EXPWY
DETROIT MI 48207

BELLA M RABINOVITCH MD
26590 WELLINGTON DR
FRANKLIN MI 48025

NAIM M RABY MD
15830 FORT
SOUTHGATE MI 48195

N RACHMANINOFF MD
HARPER HOSP
DETROIT MI 48201

PAUL D RADGENS MD
751 S MILITARY
DEARBORN MI 48124

KIANDOSH RADSAN MD
15101 SOUTHFIELD
ALLEN PARK MI 48101

SAMIR RAGHEB MD
4407 ROEMER
DEARBORN MI 48126

LAMBERT P RAHM MD L
14411 E JEFFERSON AVE
DETROIT MI 48215

FRANK P RAIFORD 111 MD
3800 WOODWARD AVE #300
DETROIT MI 48201

JAMES A RAIKES MD
SINAI HOSPITAL
DETROIT MI 48235

IMBI RALYEA MD
7815 E JEFFERSON AVE
DETROIT MI 48214

CHARLES O RAMIN MD
DETROIT GENERAL HOSP
DETROIT MI 48226

BENJAMIN R RAMOS MD
5071 LAKE BLUFF RD
WALLED LAKE MI 48088

ROBT H RAMSEY MD
3815 PELHAM RD
DEARBORN MI 48124

DAVID S RANDALL MD
3955 FORT ST
LINCOLN PARK MI 48146

BERNARD RAPOPORT MD
1800 TUXEDO
DETROIT MI 48206

SEYMOUR L RAPP MD
22711 WREXFORD DR
SOUTHFIELD MI 48075

F Q RASAY-FAROOKI MD
DETROIT GENERAL HOSP
DETROIT MI 48226

CARL A RASIMAS MD
1210 KALES BLDG
DETROIT MI 48226

HERBERT A RASKIN MD
20100 W 10 1/2 MILE RD
SOUTHFIELD MI 48075

PETER B RASTELLO MD R
3295 WEST SHORE DR
ORCHARD LAKE MI 48033

WM H RATTNER MD
954 FISHER BLDG
DETROIT MI 48202

FREDK W RAU MD
2730 E JEFFERSON
DETROIT MI 48207

CLARA RAVEN MD
8114 ST PAUL
DETROIT MI 48214

HERBERT A RAVIN MD
6767 W OUTER DR
DETROIT MI 48235

LOUIS A RAVITZ MD
23150 RIVERSIDE #415
SOUTHFIELD MI 48075

KENNETH J RAY MD
28059 ELBA DR
GROSSE ILE MI 48138

HAROLD F RAYNOR MD L
6097 S MAIN
CLARKSTON MI 48016

FLORD V RAYOS MD
13020 MACK AVE
DETROIT MI 48215

MASSOUD RAZI MD
30900 FORD RD
GARDEN CITY MI 48135

RAYMOND W REBANDT MD
2615 W JEFFERSON
TRENTON MI 48183

JOHN W REBUCK MD
2799 W GRAND BLVD
DETROIT MI 48202

LOWELL G REDDING MD
1336 SOUTHFIELD RD
LINCOLN PARK MI 48146

BENJAMIN REDER MD
17301 W EIGHT MILE RD
DETROIT MI 48235

W EARL REDFERN M D
2799 W GRAND BLVD
DETROIT MI 48202

JOSEPH D REED JR MD
448 LINCOLN
DETROIT MI 48230

MELVIN L REED MD
4160 JOHN R ST
DETROIT MI 48201

CARL E REICHERT MD
18412 MACK AVENUE
GROSSE PTE MI 48236

JOHN G REID MD
1553 WOODWARD AVE
DETROIT MI 48226

WESLEY G REID MD R
34186 SPRG VALLEY DR
WESTLAND MI 48185

WILLIAM U REIDT MD
1800 TUXEDO
DETROIT MI 48206

MORRIS V REIFF MD
21701 W 11 MILE RD
SOUTHFIELD MI 48075

RICHARD E REINHARD MD
7815 E JEFFERSON AVE
DETROIT MI 48214

ERNEST R REINSH MD L
600 TRAILWOOD PATH
BIRMINGHAM MI 48010

ROBERT O REISIG M D
20867 MACK
DETROIT MI 48236

SAML G REISMAN MD
1553 WOODWARD AVE
DETROIT MI 48226

DAVID L E REIVE MD
8125 BRANCH DR-ORE LK
BRIGHTON MI 48116

JAMES E REMSKI MD
32301 CAMBRIDGE
LIVONIA MI 48154

GEORGE L RENO M D
970 FISHER BLDG
DETROIT MI 48202

ROBT F RENTENBACH MD
501 DAV WHITNEY BLDG
DETROIT MI 48226

MANUEL RESTO MD
2310 CASS
DETROIT MI 48201

A D RESTO SOTO MD
17644 W WARREN
DETROIT MI 48228

WM S REVENO MD L
3001 W GRAND BLVD
DETROIT MI 48202

CLARENCE E REYNER MD L
10 PETERBORO ST
DETROIT MI 48201

ROBT M REYNOLDS MD
856 FISHER BLDG
DETROIT MI 48202

WM A REYNOLDS MD
HENRY FORD HOSPITAL
DETROIT MI 48202

HAROLD J REZANKA MD L
1553 WOODWARD AVE
DETROIT MI 48226

SHI HUNG RHEW MD
P O BOX 45
ELOISE MI 48132

FRANCIS P RHOADES MD
2414 16 BRODERICK TWR
DETROIT MI 48226

ROGER L RIAN MD
HENRY FORD HOSPITAL
DETROIT MI 48202

HAROLD B RICE MD R
513 GORRION
PALOS VERDES EST CA 90274

MESHEL RICE MD R
533 COATS RD
OXFORD MI 48051

WILLIAM J RICE MD
550 EASTLAND PROF BLDG
DETROIT MI 48236

M A RICHARDS MD
6309 CHARLEVOIX
DETROIT MI 48207

PAUL J RICK MD A
29630 HOOVER RD
WARREN MI 48093

WILFRED A RIDDELL MD
16985 FARMINGTON RD
LIVONIA MI 48154

RICHARD A RIDEOUT MD
6071 W OUTER DR
DETROIT MI 48235

GEO G RIECKHOFF MD L
14905 E JEFFERSON AVE
DETROIT MI 48215

JAMES A RIEDEN M D
18053 MUIRLAND
DETROIT MI 48221

JOHN B RIEGER MD L
746 PALLISTER
DETROIT MI 48202

MARY H RIEGER MD L
19285 LUCERNE DR
HIGHLAND PARK MI 48203

ROBT F RIETHMILLER MD
12444 E SEVEN MILE RD
DETROIT MI 48203

GHASSAN M RIFAI MD
17533 FORT ST
RIVERVIEW MI 48192

JOSEPH RINALDO JR MD
16001 W NINE MILE RD
SOUTHFIELD MI 48075

ROBERT W RINKEL MD
7319 PARK AVE
ALLEN PARK MI 48101

JAMES A RISING MD
432 E HANCOCK
DETROIT MI 48201

RICARDO A RIVAS MD
995 E JEFFERSON
DETROIT MI 48207

JOSEPH V RIZZO MD
260 EASTLAND CTR
PROFESSIONAL BLDG

DETROIT MI 48225

PAUL RIZZO MD
38 WARNER RD
GROSSE PTE MI 48236

EDWARD L ROBB MD L
R R #2 BOX 249A
GAYLORD MI 49735

HERBERT J ROBB MD
2706 COMFORT
BIRMINGHAM MI 48010

ARTHUR J ROBERTS MD R
859 WINCHESTER
LINCOLN PARK MI 48146

GEORGE A ROBERTS MD
21510 HARPER AVE
ST CLAIR SHORES MI 48080

ERWIN ROBIN MD
18811 HAMPSHIRE
LATHRUP VILLAGE MI 48075

HOWARD ROBINSON MD
953 FISHER BLDG
DETROIT MI 48202

JAMES H ROBINSON JR MD
10440 W 7 MILE RD
DETROIT MI 48221

ERNST A RODIN MD
951 E LAFAYETTE
DETROIT MI 48207

ANA G RODRIQUEZ MD
P O BOX 5374
DETROIT MI 48211

KARL H ROEHL MD
1800 GRINDLEY PARK
DEARBORN MI 48124

AARON Z ROGERS MD
COTTAGE HOSPITAL
GROSSE POINTE MI 48236

GEO E B ROGERS MD
8425 TWELVE MILE RD
WARREN MI 48093

J SPEED ROGERS MD
HENRY FORD HOSPITAL
DETROIT MI 48202

ROBERT P ROGERS MD
14200 PURITAN
DETROIT MI 48227

ABRAHAM S ROGOFF MD L
17000 W EIGHT MILE RD
SOUTHFIELD MI 48075

DIETER J ROHL MD
ST MARYS HOSPITAL
LIVONIA MI 48150

PAUL C ROHDE MD L
12282 E OUTER DR
DETROIT MI 48224

GRACIELA R ROJAS MD
17300 SCHAEFER HWY
DETROIT MI 48235

MICHAEL E ROLLINS MD
929 FISHER BLDG
DETROIT MI 48202

STANLEY J ROMAN MD
15020 MICHIGAN AVE
DEARBORN MI 48126

RAYMOND ROMANSKI MD
16001 W NINE MILE RD
SOUTHFIELD MI 48075

CARLOS P ROMERO JR MD
3105 CARPENTER
DETROIT MI 48212

I ENRIQUE ROMERO MD
532 EASTLAND PROF BLDG
DETROIT MI 48225

JOHN J RONAYNE JR MD
16345 W MCNICHOLS RD
DETROIT MI 48235

RICHARD A ROOD MD
7900 JOSEPH CAMPAU
DETROIT MI 48212

ROBERT C ROOD MD
134 W SECOND ST
GAYLORD MI 48735

FAYETTE C ROOT MD
719 NEW CENTER BLDG
DETROIT MI 48202

O PAUL ROSBOLT JR MD
8505 PLYMOUTH RD
DETROIT MI 48204

JAMES F ROSBOLT MD
8505 PLYMOUTH RD
DETROIT MI 48204

ARTHUR ROSE MD
7401 THIRD
DETROIT MI 48202

JOHN L ROSEFIELD MD L
65 W HANCOCK
DETROIT MI 48201

HAROLD M ROSEN MD
8620 W MC NICHOLS RD
DETROIT MI 48221

HARVEY ROSEN MD
1151 TAYLOR
DETROIT MI 48202

THEODORE S ROSEN MD A
17120 NEW JERSEY
SOUTHFIELD MI 48075

HERBERT ROSENBAUM MD
6720 EDINBOROUGH
BIRMINGHAM MI 48010

JERRY C ROSENBERG MD
1400 CHRYSLER EXPWY
DETROIT MI 48207

M K ROSENBERG MD
SINAI HOSPITAL
DETROIT MI 48235

IRWIN K ROSENBERG MD
1400 CHRYSLER FREEWAY
DEPT OF SURGERY

DETROIT MI 48207

ALVIN B ROSENBLOOM MD
17555 PARKSIDE
DETROIT MI 48221

ALBERT ROSENTHAL MD
27855 PLYMOUTH RD
LIVONIA MI 48150

LOUIS H ROSENTHAL MD
15401 W MC NICHOLS
DETROIT MI 48235

SAML ROSENTHAL MD
18055 GREENFIELD
DETROIT MI 48227

FELIX F ROSENWACH MD
19149 W SEVEN MILE RD
DETROIT MI 48219

NORMAN ROSENZWEIG MD
6767 W OUTER DR
DETROIT MI 48235

SAUL ROSENZWEIG MD L
2114 DAV BROD TOWER
DETROIT MI 48226

ARTHUR J ROSS MD
18215 GREENFIELD
DETROIT MI 48235

CHARLES V ROSS MD
25329 BRIARWYKE DR
FARMINGTON MI 48024

MERVYN B ROSS MD
19075 MIDDLEBELT RD
LIVONIA MI 48152

ROBERT R ROSS MD A
1400 CHRYSLER FREEWAY
DEPT OF UROLOGY

DETROIT MI 48207

ROBERT R ROSS JR MD
540 E CANFIELD
DETROIT MI 48201

ALEXANDER N ROTA MD
4363 SUNNINGDALE DR
BLOOMFIELD HILLS MI 48013

EDWARD M ROTARIUS MD R
PARKE DAVIS CO
DETROIT MI 48232

INA A C ROTHER MD
101 CHICAGO BLVD
DETROIT MI 48202

WALTER S ROTHWELL M D
2730 CHELSEA
TRENTON MI 48183

C M J ROTTENBERG MD
13419 FENKELL
DETROIT MI 48227

E N ROTTENBERG MD
20725 W SEVEN MILE RD
DETROIT MI 48219

LEON ROTTENBERG MD
13419 FENKELL AVE
DETROIT MI 48227

NORMAN J ROTTER MD
3815 PELHAM RD
DEARBORN MI 48214

WILLIAM ROUBECK MD
17000 W EIGHT MILE RD
SOUTHFIELD MI 48075

MICHAEL S ROWDA MD
7 CAMBRIDGE
PLEASANT RIDGE MI 48069

JOS J ROWE JR MD
401 N BRADY
DEARBORN MI 48124

RENATO S ROXAS MD
3901 BEAUBIEN
DETROIT MI 48201

L JAMES ROY MD
3800 WOODWARD AVE #512
DETROIT MI 48201

RICHARD R ROYER MD
18101 E WARREN AVE
DETROIT MI 48224

ALFRED I RUBENSTEIN MD
6767 OUTER DR W
DETROIT MI 48235

EPIMACO RUBIO MD
27139 SKYE DR WEST
FARMINGTON MI 48024

WILLIAM RUBINOFF MD
21000 MIDDLEBELT RD
FARMINGTON MI 48024

MELVYN RUBENFIRE MD
6767 W OUTER DR
DETROIT MI 48235

PAUL E RUBLE MD
605 DAVID WHITNEY BLDG
DETROIT MI 48226

NEWTON C RUCH MD
MT CARMEL MERCY HOSP
DETROIT MI 48235

EARL J RUDNER MD
18181 W 12 MILE RD
LATHRUP VILLAGE MI 48075

A D RUEDEMANN SR MD A
1633 DAV WHITNEY BLDG
DETROIT MI 48226

A D RUEDEMANN JR MD
1633 DAV WHITNEY BLDG
DETROIT MI 48226

MILTON J RUEGER MD
17220 MACK AVE
GROSSE PTE MI 48224

RALPH C RUEGER MD L
3399 DALEVIEW DR
ANN ARBOR MI 48103

RICHARD E RUEL MD
33750 FREEDOM RD
FARMINGTON MI 48024

BENEDICTO A RUIZ MD
3001 MILLER RD
DEARBORN MI 48124

LUIS C RUIZ MD
1678 MERRIANN RD
WAYNE MI 48184

EDWARD F RUNGE MD A
8295 39TH AVENUE N
ST PETERSBURG FL 33709

CLARENCE E RUPE MD
22101 MOROSS RD
DETROIT MI 48236

EMIL F RUPPRECHT MD
15901 GREENFIELD RD
DETROIT MI 48227

EMILIO RUSCIANO MD
GRACE HOSP
DETROIT MI 48201

DESMOND K RUSH MD
1429 DAV WHITNEY BLDG
DETROIT MI 48226

ROBERT L RUSKIN MD
SINAI HOSPITAL
DETROIT MI 48235

SAML H RUSKIN MD L
15901 W 9 MILE RD
SOUTHFIELD MI 48075

GEORG RUSSANOW MD
400 E LAFAYETTE
DETROIT MI 48226

HENRY N RUSSELL JR MD
15101 SOUTHFIELD
ALLEN PARK MI 48101

ISOBEL RUTHERFORD MD
DETROIT MEMORIAL HOSP
DETROIT MI 48226

RICHARD A RUZUMNA MD
23300 GREENFIELD RD
OAK PARK MI 48237

JAMES M RYAN MD
16888 GREENFIELD
DETROIT MI 48235

JAMES R RYAN MD
3930 E EIGHT MILE RD
DETROIT MI 48234

RICHARD D RYSZEWSKI MD
36300 VAN DYKE AVE
STERLING HEIGHTS MI 48077

RASSUL S SABER MD
1400 CHRYSLER EXPWY
DETROIT MI 48207

LUTFI M SA DI MD L
72445 LASSIER RD
ROMEO MI 48065

HENRY H SADLER JR MD N
11 BELVEDERE
BELVEDERE CA 94920

JOSEPH F SADUSK MD
JOS CAMPAU @ RIVER
PARKE DAVIS & CO

DETROIT MI 48232

JOS T SADZIKOWSKI MD
6033 MIDDLEBELT RD
GARDEN CITY MI 48135

SHEIKH M SAEED MD
HENRY FORD HOSPITAL
DETROIT MI 48202

BERNARD A SAGE MD
210 WOODCREST DR
DEARBORN MI 48124

HECTOR J ST AMOUR M D L
25515 BLOSSINGHAM DR
DEARBORN HGHTS MI 48127

S N SAKORRAPHOS MD L
66 CRESTVIEW RD
BELMONT MA 02178

SAUL SAKWA M D
17000 W EIGHT MILE RD
SOUTHFIELD MI 48075

FREDK A SALAMON MD
6102 E EDGEMONT
SCOTTSDALE ARIZ 85252

LACY J SALAN MD
1257 S MAIN ST
PLYMOUTH MI 48170

FERNANDO N SALAZAR MD
2645 GRANGE RD
TRENTON MI 48183

PAUL T SALCHOW MD R
8285 HARTWELL
DETROIT MI 48228

GINO G SALCICCIOLI MD
3930 E EIGHT MILE RD
DETROIT MI 48234

EDWARD S SALEM MD
22420 TWYCKINGHAM WAY
SOUTHFIELD MI 48075

MICHAEL S SALESIN MD
SINAI HOSPITAL
DETROIT MI 48235

MITCHELL SALHANEY MD
15370 LEVAN RD
LIVONIA MI 48154

CAROLINE D SALL MD
5858 MCDONIE AVE
WOODLAND HILLS CA 91364

WILLIAM T SALLEE MD
17000 W 8 MILE
SOUTHFIELD MI 48075

WILLIAM H SALOT MD
220 EASTLAND PROF BLDG
DETROIT MI 48236

HARRY C SALTZSTEIN MD L
16500 NORTH PARK DR
SOUTHFIELD MI 48075

A T SALVAGGIO MD
21811 KELLY RD
EAST DETROIT MI 48021

L CARL SAMBERG MD
2338 N WOODWARD
ROYAL OAK MI 48073

HUGO M SANCHEZ MD
2155 YORKTOWN
ANN ARBOR MI 48105

HARRY H SANO MD
24110 OXFORD
DEARBORN MI 48124

HERSHEL SANDBERG MD
17550 W 12 MILE RD
SOUTHFIELD MI 48075

IRVIN W SANDER MD R
4461 N E 31ST AVE
LIGHTHOUSE PTE FL 33064

ALVORD R SANDERSON MD L
978 PEMBERTON RD
GROSSE PTE MI 48230

MANMOHAN S SANDHU MD
2300 OAK ST
WYANDOTTE MI 48192

NATHANIEL SANDLER MD
15901 W NINE MILE RD
SOUTHFIELD MI 48075

ALICIA C SANDOVAL MD
DETROIT GENERAL HOSP
DETROIT MI 48226

E M SANTIAGO MD
ST JOHN HOSPITAL
DETROIT MI 48236

ALPHONSE M SANTINO MD M
21811 KELLY SUITE F
EAST DETROIT MI 48021

MANUEL I SANTOS MD
36616 PLYMOUTH RD
LIVONIA MI 48150

RAUL R SANTOS MD A
NORTHVILLE STATE HOSP
NORTHVILLE MI 48167

M ANDREW SAPALA MD
21471 CHERRY HILL RD
DEARBORN MI 48124

DOUGLAS A SARGENT MD
816 GRAND MARAIS
GROSSE PTE PARK MI 48236

RICHARD C SARGENT MD
17357 FENKELL ST
DETROIT MI 48227

WILLIAM R SARGENT MD
17357 FENKELL ST
DETROIT MI 48227

AREK L SARKISSIAN MD
3800 WOODWARD AVE
DETROIT MI 48201

MANUEL SARMIENTO MD
15600 PENNSYLVANIA
SOUTHFIELD MI 48075

JOHN B SARRACINO MD R
4309 FORESTWOOD DR
SAN JOSE CALIF 95121

JOHN J SAUK MD
29210 HOOVER
WARREN MI 48093

GUY O SAULSBERRY MD
4059 W DAVISON
DETROIT MI 48238

GENE A SAUNDERS MD
10933 FARMINGTON RD
LIVONIA MI 48150

DARIA H SAWDYK MD
7012 MICH AVE
DETROIT MI 48210

JOSEPH S SAZYC MD
22101 MOROSS RD
DETROIT MI 48236

HERMAN D SCARNEY MD L
3535 W 13 MILE RD
ROYAL OAK MI 48072

H C SCHAEFER MD
1081 SO OXFORD
GROSSE PTE WOODS MI 48236

ROBT L SCHAEFER MD A
76 W ADAMS AVE
DETROIT MI 48226

ROBT L SCHAEFER JR MD
74 W ADAMS
DETROIT MI 48226

JOSEPH N SCHAEFFER MD
261 MACK BLVD
DETROIT MI 48201

MARTIN SCHAEFFER MD
16186 OXLEY RD
SOUTHFIELD MI 48075

DAVID A SCHANE MD
19159 BERKELEY
DETROIT MI 48221

IVAN C SCHATTEN MD
14626 E SEVEN MILE RD
DETROIT MI 48205

IRWIN J SCHATZ MD
1400 CHRYSLER EXPWY
DETROIT MI 48207

DANIEL E SCHECHTER MD
17000 W 8 MILE RD
SOUTHFIELD MI 48075

ALAN C SCHEER MD
DETROIT MEMORIAL HOSP
DETROIT MI 48226

ISAAC S SCHEMBECK MD L
1553 WOODWARD AVE
DETROIT MI 48226

THOMAS M SCHENK MD
15101 SOUTHFIELD
ALLEN PARK MI 48101

ALAN D SCHER MD
19190 GREENFIELD
DETROIT MI 48235

ROBERT A SCHERER MD
470 FISHER BLDG
DETROIT MI 48202

PETER S SCHIDLOWSKY MD
18917 SHADYSIDE
LIVONIA MI 48152

OLEG P SCHIDLOWSKY MD
32300 SCHOOLCRAFT D-3
LIVONIA MI 48150

ARTHUR E SCHILLER MD L
1553 WOODWARD AVE
DETROIT MI 48226

RAYMOND D SCHIRACK MD R
P O BOX 41
WATERS MI 49797

NORMAN SCHKLOVEN MD
430 LOMA MEDIO RD
SANTA BARBARA CA 93103

NATHAN H SCHLAFER MD L
304 DAV WHITNEY BLDG
DETROIT MI 48226

HENRY SCHLESINGER MD
13534 WOODWARD AVE
DETROIT MI 48203

H L SCHLUSSELL MD
1812 MIDDLEBELT
GARDEN CITY MI 48135

GEORGE J SCHMIDT MD
7106 PARK AVE
ALLEN PARK MI 48101

HARRY E SCHMIDT MD R
10406 EL CAPITAN CIR
SUN CITY ARIZ 85351

JOHANN SCHMIDT MD
7815 E JEFFERSON
DETROIT MI 48214

KLAUS P SCHMIDT MD
871 FISHER BUILDING
DETROIT MI 48202

WERNER F SCHMIDT MD
17800 E EIGHT MILE RD
DETROIT MI 48225

NORMAN L SCHMITT MD
17590 W 12 MILE RD
SOUTHFIELD MI 48075

ROBT J SCHNECK MD L
1553 WOODWARD AVE
DETROIT MI 48226

CHAS L SCHNEIDER MD
22148 MICHIGAN AVE
DEARBORN MI 48124

CURT P SCHNEIDER MD L
655 FISHER BLDG
DETROIT MI 48202

JOHN R SCHNEIDER MD
15001 W 8 MILE RD
DETROIT MI 48235

KENNETH G SCHOOFF MD
951 E LAFAYETTE
DETROIT MI 48207

SARAH S SCHOOTEN MD L
15901 W 9 MILE RD #214
SOUTHFIELD MI 48075

CALVIN E SCHORER MD
951 E LAFAYETTE
DETROIT MI 48207

C F SCHROEDER MD
26505 E RIVER RD
GROSSE ILE MI 48138

GISELA SCHROEDER MD
22408 PARK LANE
ST CLAIR SHORES MI 48080

HEINZ R SCHROEDER MD
1941 HAWTHORNE BLVD
DEARBORN MI 48128

KARL F SCHROEDER MD
17725 PARK LANE
GROSSE ILE MI 48138

S L SCHUCHTER MD
24425 HOOVER
WARREN MI 48089

CARL H SCHULTE MD L
717 REDDING RD
BIRMINGHAM MI 48009

CLARENCE H SCHULTZ MD
23100 CHERRY HILL
DEARBORN MI 48124

DONALD V SCHULTZ MD
23100 CHERRYHILL
DEARBORN MI 48124

E C SCHULTZ JR MD
610 N WOODWARD AVE
BIRMINGHAM MICH 48011

ERNEST C SCHULTZ MD L
1553 WOODWARD AVE
DETROIT MI 48226

BERNARD M SCHUMAN MD
HENRY FORD HOSPITAL
DETROIT MI 48202

BENJ SCHWARTZ MD
275 W GRAND BLVD
DETROIT MI 48216

EUGENE L SCHWARTZ MD
METROPOLITAN HOSP
DETROIT MI 48206

LOUIS A SCHWARTZ MD A
P O BOX 315
ROCKPORT MA 01966

J A SCHWARTZBERG MD
19445 PLYMOUTH
DETROIT MI 48228

C F SCHWEIGERT MD
10627 CADIEUX RD
DETROIT MI 48224

BENJAMIN SCHWIMMER MD
27549 W 6 MILE RD
LIVONIA MI 48152

STANLEY V SCIARRINO MD L
16190 JAMES COUZENS
DETROIT MI 48221

WM J SCOTT MD L
20170 MACK AVE
GROSSE PTE WOODS MI 48236

GORDON P SCRATCH MD
1005 MUTUAL BLDG
DETROIT MI 48226

RAYMOND J SCREEN MD A
18520 W SEVEN MILE RD
DETROIT MI 48219

F E SEABROOKS MD
13800 LIVERNOIS
DETROIT MI 48238

ANDREW E SEGAL MD
19481 LIVERNOIS AVE
DETROIT MI 48221

NATHAN P SEGEL MD
27650 FARMINGTON RD
FARMINGTON MI 48024

ALVIN H SEIBERT MD L
1180 BEDFORD RD
GROSSE PTE PARK MI 48230

A L SEIFERLEIN MD
68 PUTMAN PLACE
GROSSE PTE SHORES MI 48236

T DAVID SEIGNE MD
GRACE HOSPITAL
DETROIT MI 48201

ELMER J SEIM MD
GRACE HOSP
DETROIT MI 48201

KARL SEITAM MD
10149 MICHIGAN AVE
DEARBORN MI 48126

RONALD A SELBST MD
26339 WOODWARD
HUNTINGTON WOODS MI 48070

MARTIN J SELDON MD
3750 WOODWARD AVE
DETROIT MI 48201

WM G SELF MD
20861 MACK AVE
GROSSE PTE MI 48236

GRAHAM A SELLERS MD A
10535 W SEVEN MILE RD
DETROIT MI 48221

JOSEPH SELTZER M D
20905 GREENFIELD
SOUTHFIELD MI 48075

ISIDORE SELZER MD
1151 TAYLOR LABS DEPT
DETROIT MI 48202

STEPHEN D SENECOFF MD
18055 GREENFIELD
DETROIT MI 48235

POVILAS SEPETYS MD
25466 CLAIRVIEW
DEARBORN MI 48124

ARTHUR G SESKI MD
1069 FISHER BLDG
DETROIT MI 48202

FRED R SEVERYN MD
15830 FORT ST
SOUTHGATE MI 48195

GEO SEWELL MD L
31801 ARLINGTON DR
BIRMINGHAM MI 48009

GUY W SEWELL MD
17751 EAST WARREN AVE
DETROIT MI 48224

MARIA SEXON-PORTE MD
3800 WOODWARD AVE
DETROIT MI 48201

JEROME E SEYMOUR MD A
DETROIT GENERAL HOSP
DETROIT MI 48226

A KARIM SHAALAN MD
415 BURNS DR
DETROIT MI 48214

EUGENE M SHAFARMAN MD
3790 WOODWARD
DETROIT MI 48201

ASGHAR SHAFADEH MD
14339 HUBBARD
LIVONIA MI 48154

JOS H SHAFFER MD L
2401 RADNOR DR
BIRMINGHAM MI 48009

LOREN W SHAFFER MD R
P O BOX 215
BOYNTON BEACH FL 33435

PARVIZ SHAMS-AVARI MD
27584 SCHOOLCRAFT
LIVONIA MI 48150

STANLEY J SHANOSKI MD
1910 DAV BRODERICK TWR
DETROIT MI 48226

H S SHAPIRO MD
19630 W MCNICHOLS RD
DETROIT MI 48219

JACK SHAPIRO MD
22669 GLASTONBURY
SOUTHFIELD MI 48075

REUBEN I SHAPIRO MD
18041 GREENFIELD
DETROIT MI 48235

ELIAS A SHAPTINI MD
1 WOODWARD AVENUE
DETROIT MI 48226

GEO M J SHARGEL MD
1800 TUXEDO
DETROIT MI 48206

WM D SHARPE MD
24621 W MCNICHOLS RD
DETROIT MI 48219

CHAS H SHARRER MD L
1133 GRAYTON RD
GROSSE PTE PARK MI 48230

FRANCIS P SHEA MD
HARPER HOSP
DETROIT MI 48201

HARRY SHECTER MD
2200 E GRAND BLVD
DETROIT MI 48211

IRENE C SHEEHAN MD
15520 GARFIELD
ALLEN PARK MI 48101

SHELIA SHEEHAN MD
3011 W GRAND BLVD
DETROIT MI 48202

MARCUS B SHEFFER MD
32900 FIVE MILE RD
LIVONIA MI 48154

AURANGZEB SHEIKH MD
3800 WOODWARD AVE
DETROIT MI 48202

PHILIP SHEINBERG MD A
OPHTHALMOLOGY DEPT
DETROIT GENERAL HOSP

DETROIT MI 48226

ARMEN SHEKERJIAN MD
13815 PURITAN
DETROIT MI 48227

DOLORES J SHELFOON MD
20101 BRIARCLIFF RD
DETROIT MI 48221

ALBERT SHEMTOB MD
12010 LINWOOD
DETROIT MI 48206

MARVIN SHERMAN MD
20100 W 10 1/2 MILE RD
SOUTHFIELD MI 48075

WM L SHERMAN JR MD A
201 E KIRBY
DETROIT MI 48202

EDGAR R SHERRIN MD
19021 W MCNICHOLS
DETROIT MI 48219

FREDERICK F SHEVIN MD
671 FISHER BLDG
DETROIT MI 48202

A P SHEWCHUK MD
7300 ALLEN RD
ALLEN PARK MI 48101

WM L SHIELDS MD L
510 HILDALE
DETROIT MI 48203

MILTON M SHIFFMAN MD
MT SINAI HOSPITAL
DETROIT MI 48235

LOUIS Z SHIFRIN MD
HENRY FORD HOSPITAL
DETROIT MI 48202

PETER G SHIFRIN MD
3535 W 13 MILE NO 507
ROYAL OAK MI 48072

LOUIS SHIOVITZ MD
5419 MICHIGAN AVE
DETROIT MI 48210

BENJ SHLAIN MD A
31156 HUNTLEY SQ EAST
BIRMINGHAM MI 48009

CLAYTON M SHORS M D
20861 MACK
GROSSE PTE WOODS MI 48236

ALFRED J SHREVE MD
4520 FIRESTONE AVE
DEARBORN MI 48126

JOHN M SHUEY MD
17198 OAK DR
DETROIT MI 48221

ARTHUR S SHUFRO MD
28585 RIVERCREST DR
SOUTHFIELD MI 48075

HERSCHEL A SHULMAN MD
207 NORTHLAND MED BLD
SOUTHFIELD MI 48075

EDWARD J SHUMAKER MD
950 FISHER BLDG
DETROIT MI 48202

EDWARD H SIEBER MD
6650 GREENFIELD RD
DEARBORN MI 48126

WILLIAM E SIEBERT MD
23023 ORCHARD LAKE RD
FARMINGTON MI 48024

JOHN L SIEFERT MD R
PO BOX 601
JUPITER FL 33458

HENRY SIEGEL MD
18400 W 12 MILE RD
SOUTHFIELD MI 48075

JOSE M SIERO MD
9105 VAN DYKE
DETROIT MI 48213

LORRAINE A SIEVERS MD
1457 DAVID WHITNEY BG
DETROIT MI 48226

JOHN W SIGLER MD
HENRY FORD HOSP
DETROIT MI 48202

ENRIQUE E SIGNORI MD
30900 FORD RD
GARDEN CITY MI 48135

ALLEN SILBERGLEIT MD
1400 CHRYSLER EXPWY
DETROIT MI 48207

JACOB A SILL MD
1125 ARDMOOR DR
BIRMINGHAM MI 48010

JOHN J SILLER MD
17000 W 8 MILE RD
SOUTHFIELD MI 48075

ROBT J SILLERY MD
460 LAKELAND
GROSSE PTE MI 48236

RICHARD O SILLS MD
5675 FORMAN DR
BIRMINGHAM MI 48010

YVAN J SILVA MD
3800 WOODWARD AVE
DETROIT MI 48201

ISRAEL Z SILVARMAN MD L
9105 VAN DYKE AVE
DETROIT MI 48213

DONALD F SILVER MD
467 FISHER BLDG
DETROIT MI 48202

ISRAEL W SILVER MD
20000 W CHICAGO
DETROIT MI 48228

ROBERT R SILVER MD
60 W HANCOCK
DETROIT MI 48201

MAURICE M SILVERMAN MD
17301 W EIGHT MI RD
DETROIT MI 48235

MAX SILVERMAN MD
2240 W GRAND BLVD
DETROIT MI 48208

M E SILVERSTEIN MD
20970 INDEPENDENCE
SOUTHFIELD MI 48075

O D SILVERSTEIN MD
17000 W 8 MILE RD
SOUTHFIELD MI 48075

DONALD R SIMMONS MD
529 FISHER BLDG
DETROIT MI 48202

HEINZ G SIMON MD
12206 MORANG
DETROIT MI 48224

DAVID F SIMPSON MD
20512 ARDMORE PARK
ST CLAIR SHORES MI 48080

GORDON E SIMPSON MD
18101 E WARREN AVE
DETROIT MI 48224

CLYDE B SIMSON MD
951 E LAFAYETTE
DETROIT MI 48207

A SINGHAKOWINTA MD
3800 WOODWARD AVE
DETROIT MI 48201

BAGESHWARI P SINHA MD A
DETROIT GENERAL HOSP
DEPT OF UROLOGY A

48820

JEAN SINKOFF MD
27301 DEQUINDRE #202
MADISON HEIGHTS MI 48071

GEO W SIPPOLA MD L
13603 LA SALLE BLVD
DETROIT MI 48238

ORLANDO S SISON MD
1400 CHRYSLER EXPWY
DETROIT MI 48207

B J SIVAK MD
24665 SANTA BARBARA
SOUTHFIELD MI 48075

MICHEL A SKAFF MD
1059 BEDFORD
GROSSE PTE PARK MI 48236

MANUEL SKLAR M D
18400 SCHAEFER RD
DETROIT MI 48235

EDWARD J SKULLY MD
14000 LINNHURST
DETROIT MI 48205

FRANK J SLADEN MD L
HENRY FORD HOSP
DETROIT MI 48202

LEO W SLAZINSKI MD L
7618 MICHIGAN AVE
DETROIT MI 48210

JOHN G SLEVIN MD
1132 WHITTIER AVE
GROSSE PTE PARK MI 48236

EDWARD P SLIWIN MD
13244 W WARREN
DEARBORN MI 48126

JOS SLUSKY MD
854 FISHER BLDG
DETROIT MI 48202

ROBT F SLY MD
2101 MONROE BLVD
DEARBORN MI 48124

HENRY SMALL MD
15300 W MCNICHOLS RD
DETROIT MI 48235

JOHN SMALL MD
19223 CONANT
DETROIT MI 48234

HOMER M SMATHERS MD
17620 W MCNICHOLS
DETROIT MI 48235

WARD M SMATHERS MD
17620 W MCNICHOLS
DETROIT MI 48235

ARTHUR R SMECK MD L
1036 WATERMAN AVE
DETROIT MI 48209

BARRY G SMILER MD
20925 ANDOVER
SOUTHFIELD MI 48075

JAMES J SMIGGEN MD
15901 W 9 MILE RD
SOUTHFIELD MI 48075

ANDREW J SMITH JR MD
2950 PURITAN
DETROIT MI 48238

DOUGLAS H SMITH MD
10151 MICHIGAN
DEARBORN MI 48126

HENRY L SMITH MD L
16401 GRAND RIVER AVE
DETROIT MI 48227

RICHARD H SMITH MD
5050 JOY RD
DETROIT MI 48204

RICHMOND W SMITH JR MD
2799 W GRAND BLVD
DETROIT MI 48202

ROGER F SMITH M D
28400 W SUNSET BLVD
LATHRUP VILLAGE MI 48075

STANLEY M SMYKA MD
20945 KELLY RD
EAST DETROIT MI 48021

EUGENE A SNIDER MD
20905 GREENFIELD
SOUTHFIELD MI 48075

EDWIN C SNOKE MD
2901 WEST RD
TRENTON MI 48183

LINWOOD W SNOW MD L
502 W MAIN ST
NORTHVILLE MI 48167

RICHARD J SNYDER MD
33433 SIX MILE RD
LIVONIA MI 48152

ROBT A SOBEL MD
20211 GREENFIELD
DETROIT MI 48235

RALPH B SODERBERG MD
7815 E JEFFERSON AVE
DETROIT MI 48214

SIDNEY SOIFER MD
SINAI HOSPITAL
DETROIT MI 48235

WM M SOKOL MD
15901 W NINE MILE RD
SOUTHFIELD MI 48075

RAYMOND A SOKOLOV MD R
8162 E JEFFERSON
DETROIT MI 48104

A H SOKOLOWSKI MD
20445 VAN DYKE AVE
DETROIT MI 48234

LINCOLN E SOLBERG MD
2021 MONROE
DEARBORN MI 48124

FRANK J SOLER MD
25447 PLYMOUTH
DETROIT MI 48239

SION SOLEYMANI MD
4400 LIVERNOIS
DETROIT MI 48210

ALEX S SOLLER MD
19309 GREENFIELD
DETROIT MI 48235

A B SOLOMON MD
26440 SOUTHFIELD RD
LATHRUP VILLAGE MI 48075

ROBERT J SOLOMON MD
15101 SOUTHFIELD
ALLEN PARK MI 48101

OTTO P SOLTES MD
17000 W EIGHT MILE
SOUTHFIELD MI 48075

THOS H SOMERVILLE MD
36475 FIVE MILE RD
LIVONIA MI 48154

LEWIS P SONDA JR MD
10951 FARMINGTON RD
LIVONIA MI 48150

ROBERT A SONGE MD
OAKWOOD HOSPITAL
DEARBORN MI 48121

MASSOUD SOOUDI MD
6650 PRUTZMAN 113C
BEAUMONT TEXAS 77706

MILTON L SOROCK MD
20905 GREENFIELD RD
SOUTHFIELD MI 48075

CARLOS M A SOSA MD
6307 W FORT ST
FISHER BODY DIV
GMC
DETROIT MI 48209

FREDDY R SOSA MD
28245 SOUTHFIELD
LATHRUP VILLAGE MI 48075

RAYMOND D SPHIRE MD
1420 ST ANTOINE
DETROIT MI 48226

ADOLPH S SPIRO MD
13240 HARPER
DETROIT MI 48213

BERTRAM J SPIWAK MD
7407 CATHEDRAL DR
BIRMINGHAM MI 48010

BENJ R SPRINGBURN MD L
15818 E WARREN AVE
DETROIT MI 48224

CARL J SPRUNK MD
2900 OAKWOOD BLVD
MELVINDALE MI 48122

ETHELBERT SPURRIER MD L
261 KENWOOD CT
GROSSE PT FARMS MI 48236

WALTER M SQUIRES MD R
1616 S 28 AVE
ST PETERSBURG FL 33712

MARY S STAHLY MD
SINAI HOSP
DETROIT MI 48235

HUGH STALKER MD R
824 LAKESHORE RD
GROSSE PTE SHRS MI 48236

BENJAMIN B STAMELL MD
17000 W EIGHT MILE RD
SOUTHFIELD MI 48075

MEYER STAMELL MD
14634 GREENFIELD ST
DETROIT MI 48227

MYRON R STANTON MD
7441 W 7 MILE RD
DETROIT MI 48221

WM J STAPLETON JR MD L
201 E KIRBY AVE
DETROIT MI 48202

RENATO STARICCO MD
3783 FORT ST
LINCOLN PARK MI 48146

DARRELL E STATZER MD
3800 WOODWARD #502
DETROIT MI 48201

HOWARD P STAUB MD R
9210 JEROME
DETROIT MI 48239

LOUIS W STAUDT MD
1201 PILGRIM
BIRMINGHAM MI 48009

CHAS E STEBBINS MD
705 NORTHLAND MED BLDG
SOUTHFIELD MI 48075

FREDK C STEBNER MD
DETROIT GENERAL HOSP
DETROIT MI 48226

WILLIAM B STEEL MD
HUTZEL HOSP
DETROIT MI 48232

CHAS A D STEEPE MD
20340 HARPER
HARPER WOODS MI 48236

ANDREW E STEFANI MD
471 OXFORD RD
GROSSE PTE WOODS MI 48236

ERNEST L STEFANI MD L
18455 JAS COUZENS HWY
DETRUIT MI 48235

RAYMOND T STEFANI MD
13516 STOEPEL
DETROIT MI 48238

ZWI STEIGER MD
VA HOSPITAL
ALLEN PARK MI 48101

ALBERT H STEIN MD
16300 W 9 MILE RD
SOUTHFIELD MI 48075

HARVEY S STEIN MD
21000 MIDDLEBELT RD
FARMINGTON MI 48024

SAUL C STEIN MD
23105 VAN DYKE
WARREN MI 48089

A L STEINBACH MD
7815 E JEFFERSON
DETROIT MI 48214

E J STEINBERGER MD L
6402 W FORT
DETROIT MI 48209

FREDK B STEINER MD
29108 FORD RD
GARDEN CITY MI 48135

S D STEINER MD
3044 W GRAND BLVD
DETROIT MI 48202

MILTON J STEINHARDT MD A
18910 BIRCHCREST
DETROIT MI 48221

BRUCE W STEINHAUER MD
HENRY FORD HOSP
DETROIT MI 48202

CHESTER E STELLHORN MD L
16589 WARWICK
DETROIT MI 48219

MARY C STELLHORN MD A
16616 MACK AVE
DETROIT MI 48224

EDWARD M STEMPEL MD
18324 FAIRFIELD AVE
DETROIT MI 48221

RICHARD F STERBA MD L
861 WHITTIER BLVD
GROSSE PTE MI 48230

EDWARD A STERN MD L
15901 W 9 MILE RD
C/O DR J STERN

SOUTHFIELD MI 48075

JOSEPH W STERN MD
15901 W 9 MILE RD
SOUTHFIELD MI 48075

JULIAN STERN MD
15121 W MCNICHOLS RD
DETROIT MI 48235

LEONARD H STERN MD
22699 VAN DYKE
WARREN MI 48089

LOUIS D STERN MD L
1553 WOODWARD AVE
DETROIT MI 48226

VERNON STERNHILL MD
1800 TUXEDO
DETRUIT MI 48206

CHAS H STEVENS MD
15901 W 9 MILE RD
SOUTHFIELD MI 48075

TATJANA STEVENS MD
34815 MICHIGAN AVE
WAYNE MI 48184

CHAS S STEVENSON MD
960 FISHER BLDG
DETROIT MI 48202

LEE B STEVENSON MD
22812 WALSINGHAM RD
FARMINGTON MI 48024

M N STEWART JR MD
20905 GREENFIELD
SOUTHFIELD MI 48075

MARJORIE STEWART MD A
581 GOLFCREST
DEARBORN MI 48124

ROBERT M STEWART MD
10933 FARMINGTON
LIVONIA MI 48150

DANL M STIEFEL MD L
1563 DAV WHITNEY BLDG
DETROIT MI 48226

KARL STILLWATER MD
29305 PTE-O-WOODS #207
SOUTHFIELD MI 48075

DWIGHT E STITH MD
505 OWEN ST
DETROIT MI 48202

GODFREY D STOBBE MD
GRACE HOSP
DETROIT MI 48201

THOMAS B STOCK MD
25500 FRIAR LANE
SOUTHFIELD MI 48075

LAWRENCE L STOCKER MD
26615 GREENFIELD
SOUTHFIELD MI 48075

MARVIN L STOCKER MD
16401 GRAND RIVER
DETROIT MI 48227

BENJ W STOCKWELL MD
1553 WOODWARD AVE
DETROIT MI 48226

THADDEUS STOKFISZ M D L
7012 MICHIGAN
DETROIT MI 48210

RAYMOND STOLLER M D
25210 GRAND RIVER AVE
DETROIT MI 48240

SIDNEY L STONE MD
22790 KELLY RD
E DETROIT MI 48021

MICHAEL R STOYKA MD
155 STEPHENS
GROSSE PTE MI 48236

MARTIN E STRAND MD
22400 CHERRY HILL
WEST DEARBORN MI 48124

PETER K STRATTON MD
5237 OAKMAN
DEARBORN MI 48128

HENRY D STRICKER MD L
930 WEAVER RD R#2
MILFORD MI 48042

FRED L STRICKRODT MD
3800 BISHOP RD
DETROIT MI 48224

DOUGLAS D STRONG MD
5050 JOY RD
DETROIT MI 48204

G E STRONSKI MD
9901 WHITTIER
DETROIT MI 48224

JOSEPH T STROYLS MD
3800 WOODWARD
DETROIT MI 48201

JOAN C STRYKER MD
2853 BIDDLE
WYANDOTTE MI 48192

WALTER A STRYKER MD
P O BOX 10
WYANDOTTE MI 48192

CLAYTON T STUBBS MD R
5 BELLEVIEW
MT CLEMENS MI 48043

HAROLD W STUBBS MD L
13700 WOODWARD AVE
DETROIT MI 48203

JANUSZ SUBCZYNSKI MD
17800 EIGHT MILE RD
HARPER WOODS MI 48225

LEONARD SUDAKIN MD
15901 W 9 MILE RD
SOUTHFIELD MI 48075

IRENE T S SUEN MD
CHRYSLER CORP BOX 1919
DETROIT MI 48231

H SAUL SUGAR MD
970 FISHER BLDG
DETROIT MI 48202

MARCUS H SUGARMAN MD
15201 W MC NICHOLS
DETROIT MI 48235

NORBERTO A SUGAYAN MD
34275 MUNGER DR
LIVONIA MI 48154

PAUL J SULLIVAN MD
26711 WOODWARD
HUNTINGTON WOODS MI 48070

THOMAS M SULLIVAN MD
951 E LAFAYETTE
DETROIT MI 48207

L CARL SULTZMAN MD
55 VENDOME
GROSSE PTE FARMS MI 48236

BERNARD T SUMCAD MD
861 MONROE BLVD
DEARBORN MI 48124

WM A SUMMERS MD
1553 WOODWARD AVE
DETROIT MI 48226

RICHARD W SUNDLING MD
714 NEW CENTER BLDG
DETROIT MI 48202

COLIN T SUTHERLAND MD
39000 MOUND RD
STERLING HEIGHTS MI 48659

RAYMOND H SUWINSKI MD
9801 CONANT ST
HAMTRAMCK MI 48212

LIONEL F SWAN MD
8300 MACK AVE
DETROIT MI 48214

CARL W SWANSON MD L
523 LAKEPOINTE
GROSSE PTE MI 48230

ROBT G SWANSON MD
314 EASTLAND PROF BLDG
DETROIT MI 48236

FRED G SWARTZ JR MD
377 FISHER RD SUITE F
GROSSE PTE MI 48230

DONALD N SWEENY JR MD
8445 E JEFFERSON
DETROIT MI 48214

LAWRENCE C SWEET MD
HENRY FORD HOSPITAL
DETROIT MI 48202

BERTRAND C SWITZER MD R
1862 RIVERSIDE
COLUMBUS OH 43212

JOHN T SYDNOR MD
3800 WOODWARD AVE
DETROIT MI 48201

G G SZAPPANYOS MD A
HOSP CANTONAL DEGENEVE
GENEVE SWITZERLAND

D EMERICK SZILAGYI MD
HENRY FORD HOSP
DETROIT MI 48202

JOSEPH P SZOKOLAY MD
HENRY FORD HOSP
DETROIT MI 48202

ROMEO H TABBILOS MD
1315 KALES BLDG
DETROIT MI 48226

RODMAN E TABER MD
520 SADDLE LN
GROSSE PTE WOODS MI 48236

ALBERT J TACTAC MD
15240 MERRIMAN
LIVONIA MI 48154

JOELLA G TADIAN MD
23100 CHERRY HILL
DEARBORN MI 48124

JOHN P TAGETT MD
25750 W OUTER DR
LINCOLN PARK MI 48146

FRANK G TALBOT MD
1365 CASS
DETROIT MI 48226

EDWARD J TALLANT MD
18041 GREENFIELD
DETROIT MI 48235

ROBT W TALLEY MD
HENRY FORD HOSP
DETROIT MI 48202

FREDK N TALMERS MD
VA HOSPITAL
ALLEN PARK MI 48101

E J TAMBLYN MD L
737 MARLBOROUGH
DETROIT MI 48215

LIONG G TAN MD
22813 CANTERBURY DR
ST CLAIR SHORES MI 48092

EMANUEL TANAY MD
861 FISHER BLDG
DETROIT MI 48202

JOSE S TANDOC MD
P O BOX 570

FORD MOTOR CO
WARREN MI 48090

NATALIA M TANNER MD
8401 WOODWARD AVE
DETROIT MI 48202

JULIUS C TAPERT MD A
120 MACKINAC
HARSENS ISLAND MI 48028

HARRY TARPINIAN MD
10955 FARMINGTON RD
LIVONIA MI 48150

HELEN E TASKER MD
10454 KINGSTON
HUNTINGTON WOODS MI 48070

RALPH N TASSIE MD L
15000 GRATIOT AVE
DETROIT MI 48205

GABRIEL A TATELIS MD L
21811 KELLY RD
E DETROIT MI 48021

MAURICE TATELMAN MD
6767 W OUTER DR
DETROIT MI 48235

WM H TAURENCE MD
1860 FORD AVE
WYANDOTTE MI 48192

CEMALETTIN TAVLAN MD
35779 JOHNSTOWN RD
FARMINGTON MI 48024

AMOS TAYLOR III MD
4059 W DAVISON
DETROIT MI 48238

JUNIUS L TAYLOR MD
1566 W GRAND BLVD
DETROIT MI 48208

MILES TAYLOR MD
550 ESTLD PROF BLDG
DETROIT MI 48236

NELSON M TAYLOR MD
722 NOTRE DAME AVE
GROSSE PTE MI 48230

RICHARD A TAYLOR MD
28 W ADAMS ST
DETROIT MI 48226

WARD M TAYLOR MD
424 W WOODRUFF #101
TOLEDO OHIO 43624

WM V TAYLOR MD
17200 E WARREN
DETROIT MI 48224

HENRY A TAZZIOLI MD
21970 MOROSS RD
DETROIT MI 48236

MALCOLM J J TEAR MD
862 W MC NICHOLS RD
DETROIT MI 48203

MYER TEITELBAUM MD
18510 MEYERS ROAD
DETROIT MI 48235

ERTUGRUL TEKISALP MD
32300 SCHOOLCRAFT
LIVONIA MI 48150

ALLEN J TELMOS MD
16401 GRAND RIVER AVE
DETROIT MI 48227

THOS A TENAGLIA MD
3180 FORT ST
LINCOLN PARK MI 48146

E M TENDERO MD
1151 TAYLOR
DETROIT MI 48202

ELMER C TEXTER MD L
16840 E WARREN
DETROIT MI 48224

ANNA M THEODOULOU MD
18700 MEYERS RD
GRACE HOSPITAL N W

DETROIT MI 48235

GLAFKOS THEODOULOU MD
1800 TUXEDO
DETROIT MI 48206

LEON D THOMAS MD
17320 LIVERNOIS
DETROIT MI 48221

L MURRAY THOMAS MD
801 DAV WHITNEY BLDG
DETROIT MI 48226

ARTHUR L THOMPSON MD
12632 DEXTER
DETROIT MI 48238

HUGH O THOMPSON MD A
ROUTE 3 BOX 388
GAYLORD MI 49735

WM A THOMPSON MD R
12632 DEXTER
DETROIT MI 48238

NORMAN W THOMS MD
1400 CHRYSLER EXPWY
DETROIT MI 48207

JERRY A THORNTON MD
525 VISGER RD
ECORSE MI 48229

G C THOSTESON MD
14596 GRANDVILLE
DETROIT MI 48223

ROBT C THUMANN MD
21223 MACK AVE
GROSSE PTE WOODS MI 48236

SADIE THUMIM MD
10445 BELTON
DETROIT MI 48204

RICHARD J TIMMA MD
17220 W 8 MILE RD
SOUTHFIELD MI 48075

SIK WOO TING MD
22700 GARRISON #408
DEARBORN MI 48124

YOEH MING TING MD
29555 BRISTOL LN
BIRMINGHAM MI 48010

JOYCE TIPPINS MD
4732 BARCROFT WAY
STERLING HEIGHTS MI 48077

ROBERT E TOAL MD
18901 GRAND RIVER
DETROIT MI 48223

RODRIGO R TOBAR MD
21110 WINCHESTER
SOUTHFIELD MI 48075

THEODORE G TODOROFF MD
2021 MONROE
DEARBORN MI 48124

JESSE C TOLBERT MD
10326 W SEVEN MILE RD
DETROIT MI 48221

AMOD S TOOTLA MD
HENRY FORD HOSPITAL
DETROIT MI 48202

ESTELLE P TORRES MD
3985 CANIFF
HAMTRAMCK MI 48212

RAUL M TORRES JR MD
3985 CANIFF ST
HAMTRAMCK MI 48212

LAWRENCE P TOURKOW MD
8319 HENDRIE
HUNTINGTON WOODS MI 48070

FRANK M TOWNSEND JR MD L
1055 TRUMBULL
DETROIT MI 48216

MARGARET D TOXOPEUS MD
DETROIT GENERAL HOSP
DETROIT MI 48226

JOHN M TRACEY M D
15317 W MC NICHOLS
DETROIT MI 48235

EDWARD G TRACY MD
233 WARRINGTON RD
BLOOMFIELD HILLS MI 48013

LIBORIA TRANCHIDA MD
DETROIT GEN HOSP
DETROIT MI 48226

HAROLD L TREMAIN MD
1300 LAFAYETTE E #1306
DETROIT MI 48207

GEO A TROESTER MD
18633 MACK
DETROIT MI 48236

MARTIN B TROTSKY MD
7411 THIRD AVE
DETROIT MI 48202

PAUL K TRUBA MD
22770 KELLY RD
EAST DETROIT MI 48021

JOHN M TRUDEAU MD
14200 PURITAN
DETROIT MI 48221

PAUL E TRUDGEN MD
1224 BEECHMONT
DEARBORN MI 48124

RONALD E TRUNSKY MD
SINAI HOSPITAL
DETROIT MI 48235

SAMUEL TRUPIANO MD
420 EASTLAND PROF BLDG
DETROIT MI 48236

S S TSANGALIAS MD
63 KERCHEVAL
GROSSE PTE FARMS MI 48236

GEORGE T C TSENG MD
16749 WHITLEY DR
LIVONIA MI 48154

ERNESTO C TUAZON MD
DETROIT MEM HOSP
DETROIT MI 48226

FLOYD S TUKEL MD
1922 MONROE
DEARBORN MI 48124

JOHN A TULLOCH MD
326 EASTLAND CTR
PROFESSIONAL BLDG

HARPER WOODS MI 48225

OSCAR C TUMACDER MD
771 FISHER BLDG
DETROIT MI 48202

THELMA T TUMACDER MD
DETROIT GENERAL HOSP
DETROIT MI 48226

R T TUMBOKON MD
700 STEWART RD
MONROE MI 48161

VINCENT J TURCOTTE MD A
545 LAKELAND RD
GROSSE PTE MI 48230

BENJAMIN S TURLA MD
GRACE HOSPITAL
DETROIT MI 48201

HENRY TURKEL MD
8000 W SEVEN MILE RD
DETROIT MI 48221

JACK V TURNBULL MD
22243 W WARREN AVE
DEARBORN HEIGHTS MI 48127

EDWARD T TURNER MD
5050 JOY RD
DETROIT MI 48204

RACHEL E TURNER MD
895 W OAKRIDGE
FERNDALE MI 48220

ROBERT R TURNER MD
3745 MONROE BLVD
DEARBORN MI 48124

ODIE T UDDYBACK MD
8401 WOODWARD AVE
DETROIT MI 48202

CHESTER J UJDA MD
32302 WOODBROOK
WAYNE MI 48184

ARTHUR A ULMER MD
79 GREENBRIAR
GROSSE PTE SHORES MI 48236

JOHN L ULRICH MD
18550 W OUTER DR
DEARBORN MI 48128

WILLIS H ULRICH MD
22365 GRAND RIVER AVE
DETROIT MI 48219

ANSELMO F UNITE MD
770 FISHER BLDG
DETROIT MI 48202

WM T UNKEFER MD
17401 GREENFIELD RD
DETROIT MI 48235

RUTILIO URIBE MD
ST JOSEPH HOSPITAL
DETROIT MI 48211

HAROLD E USNDEK MD
18485 MACK AVE
DETROIT MI 48236

OTONAS VAITAS M D
10531 FARMINGTON RD
LIVONIA MI 48150

V K VAITKEVICIUS MD
1400 CHRYSLER FREEWAY
DETROIT MI 48207

R I VALDESUSO MD
19200 COLLINSON
EAST DETROIT MI 48021

EMILIO E VALENZUELA MD
28382 HARWICH
FARMINGTON MI 48024

VIMAL P VALSANGKAR MD
1151 TAYLOR
DETROIT MI 48202

JOSE V VALDEZ MD
5450 FORT ST
TRENTON MI 48183

F G P VALVEKENS MD M
1800 TUXEDO
DETROIT MI 48206

WM L VAN ARSDALE MD A
1000 CHUNG CHENG RD
TAIPEI TAIWAN

L A VAN BECELAERE MD
15830 FORT
SOUTHGATE MI 48195

H J VANDEN BERG JR MD
612 PROFESSIONAL PLAZA
DETROIT MI 48201

F G VAN DEVENTER MD
19959 VERNIER RD
HARPER WOODS MI 48236

JAMES E VAN ECK MD
11540 MORANG DR
DETROIT MI 48224

DONALD E VAN HOEK MD
20323 MACK
GROSSE PTE WOODS MI 48236

L F VAN RAAPHORST MD
18560 W OUTER DR
DEARBORN MI 48128

STEVEN L VAN RIPER MD L
1490 IROQUOIS
DETROIT MI 48214

E J VAN SLYCK MD
HENRY FORD HOSP
DETROIT MI 48202

HENRY J VANVALZAH MD
22000 GIBRALTER RD
FLAT ROCK MI 48134

HABIB VARIZI-NAZARI MD
4400 ORCHARD LAKE RD
ORCHARD LAKE MI 48033

HRATCH VARTANIAN MD
952 DAV WHITNEY BLDG
DETROIT MI 48226

VASILE O VASU MD L
12897 WOODWARD AVE
HIGHLAND PK MI 48203

CLARENCE B VAUGHN MD
GRACE HOSPITAL
DETROIT MI 48201

WILLIAM F VELING MD
13700 WOODWARD
HIGHLAND PARK MI 48203

RAMON W VERA MD
15901 W 9 MILE RD
SOUTHFIELD MI 48075

JAY VICTOR MD
14575 SOUTHFIELD
ALLEN PARK MI 48101

ISAIAS S VILLAROSA MD
GRACE HOSP
DETROIT MI 48201

CARLOS G VILLARREAL MD
20225 ANN ARBOR TRAIL
DEARBORN HEIGHTS MI 48127

CHARLES C VINCENT MD
2424 PURITAN
DETROIT MI 48238

PATRICK A VILLANI MD
20811 KELLY RD
EAST DETROIT MI 48021

JOHN W VINCENT MD
22146 FORD RD
DEARBORN MI 48128

W FRASER VIPOND MD
15398 GRATIOT AVE
DETROIT MI 48205

GEO J VISCOMI MD
24240 MICHIGAN AVE
DEARBORN MI 48124

DONALD W VISSCHER MD
12922 W WARREN
DEARBORN MI 48126

MILTON O VOKES MD L
10182 GRATIOT AVE
DETROIT MI 48213

VOLLRAD J VONBERG MD
232 EASTLAND PROF BLDG
HARPER WOODS MI 48225

E C VONDERHEIDE MD A
22431 NORCREST
ST CLAIR SHORES MI 48080

NOEL A VONGLAHN MD
29927 W SIX MILE
LIVONIA MI 48152

ARTHUR J VORWALD MD A
1741 DECKNER AVE
GREEN BAY WISC 54302

ALBERT E VOSSLER MD L
1144 DAV WHITNEY BLDG
DETROIT MI 48226

I J VOUDOUKIS MD
3800 WOODWARD AVE
DETROIT MI 48201

JOHN WADE MD
17000 W EIGHT MILE RD
SOUTHFIELD MI 48075

HAROLD R WAGENBERG MD
19201 W 7 MILE RD
DETROIT MI 48219

LYLE G WAGGONER MD
1010 PROFESSIONAL PL
DETROIT MI 48201

JOHN R WAGNER MD
17712 MACK AVE
DETROIT MI 48224

RICHARD A WAHL MD
18211 W 12 MILE RD
LATHRUP VILLAGE MI 48075

BENJ J WAILES JR MD
3800 WOODWARD AVE
DETROIT MI 48201

MAX J WAINGER MD
17550 W 12 MILE RD
SOUTHFIELD MI 48075

MICHAEL A WAINSTOCK MD
621 DAVID WHITNEY BL
DETROIT MI 48226

EVERAL M WAKEMAN MD
155 S DENWOOD
DEARBORN MI 48124

GEO L WALDBOTT MD L
28411 HOOVER RD
WARREN MI 48093

FRANK B WALKER II MD
1206 BALFOUR RD
GROSSE PTE PARK MI 48230

GEO L WALKER MD
7815 E JEFFERSON AVE
DETROIT MI 48214

ROBERT M WALKER MD
2101 MONROE
DEARBORN MI 48124

ROBT G WALKOWIAK MD
76 W ADAMS AVE
DETROIT MI 48226

JOHN P WALLER MD
32238 SCHOOLCRAFT
LIVONIA MI 48150

ALEXANDER J WALT MD
DETROIT RECEIVING HOSP
DETROIT MI 48226

ARTHUR W WALTER MD
7165 OLD MILL RD
BIRMINGHAM MI 48010

FLOYD J WALTER MD
18211 W 12 MILE RD
LATHRUP VILLAGE MI 48075

CHUN HENG H WANG MD
25350 DENNISON
FRANKLIN MI 48025

JOY YA HSIANG WANG MD
2020 MIDDLEBELT
GARDEN CITY MI 48135

JAMES N WARDELL MD
3414 MCDOUGALL
DETROIT MI 48207

BERNICE K WARREN MD
24111 SOUTHFIELD RD
SOUTHFIELD MI 48075

IRVING A WARREN MD
24111 SOUTHFIELD RD
SOUTHFIELD MI 48075

MAX W WARREN MD
23120 VALLEY CREST LN
SOUTHFIELD MI 48075

RICHARD A WASS MD
7333 ALLEN RD
ALLEN PARK MI 48101

HAROLD WASSERMAN MD
22341 W EIGHT MILE
DETROIT MI 48219

LEWIS C WASSERMANN MD
300 W MC NICHOLS RD
HIGHLAND PARK MI 48203

ROBERT L WATLING MD
15761 ANDOVER DR
DEARBORN MI 48120

HARWOOD G WATSON MD
935 S MILITARY AVE
DEARBORN MI 48124

JAMES E WATSON JR MD
18524 GRAND RIVER
DETROIT MI 48223

F B WATTS JR MD
HARPER HOSPITAL
DETROIT MI 48201

FREDK B WATTS MD
16321 MACK AVE
DETROIT MI 48224

JOHN C WATTS MD
7360 12TH STREET
DETROIT MI 48206

JOS C WATTS MD
15901 W 9 MILE RD
SOUTHFIELD MI 48075

MORRIS A WAYNE MD L
15930 LIVERNOIS AVE
DETROIT MI 48221

ARTHUR W WEAVER MD
VA HOSPITAL
ALLEN PARK MI 48101

CLARENCE E WEAVER MD R
1260 SE FOURTH CT
DEERFIELD BEACH FL 33441

KARL W WEBER MD R
18101 E WARREN AVE
DETROIT MI 48224

JEREMY D WEBSTER MD
21223 MAC AVE
GROSSE PTE WOODS MI 48236

JOHN E WEBSTER MD A
47 PINE COURT
DETROIT MI 48236

STEPHEN B WEBSTER MD
693 GLENHURST
BIRMINGHAM MI 48009

M L WECKSTEIN MD
HENRY FORD HOSP
DETROIT MI 48202

MILTON R WEED MD
1059 BERKSHIRE RD
GROSSE PTE PARK MI 48230

RICHARD S WEGRYN MD
661 WASHINGTON RD
DETROIT MI 48230

ALBERT M WEHENKEL MD L
3929 CHAUCER PL 602H
SARASOTA FL 33577

MAURICE B WEHR M D
2355 FORT STREET
LINCOLN PARK MI 48146

JOHN H WEIDNER MD
25701 JOY RD
DEARBORN HGHTS MI 48127

JOHN F WEIKSNAR MD
1800 TUXEDO
DETROIT MI 48206

ALLEN D WEINER MD
21000 MIDDLEBELT RD
FARMINGTON MI 48024

MAURICE B WEINER MD
20211 GREENFIELD
DETROIT MI 48235

RICHARD WEINER MD
20211 GREENFIELD
DETROIT MI 48235

JACOB WEINSTEIN MD
751 FISHER BLDG
DETROIT MI 48202

BURTON H WEINTRAUB MD
15121 W MCNICHOLS RD
DETROIT MI 48235

A ALLEN WEISBERG MD
20 W SEVEN MILE RD
DETROIT MI 48203

HARRY WEISBERG MD
15101 W MC NICHOLS RD
DETROIT MI 48235

JACOB WEISBERG MD A
15101 W MC NICHOLS RD
DETROIT MI 48235

IRVIN I WEISENTHAL MD
5764 WOODWARD AVE
DETROIT MI 48202

CASIMIR P WEISS MD
10036 JOS CAMPAU
DETROIT MI 48212

ROBERT M WEISS MD M
1215 LAFAYETTE TWRS E
DETROIT MI 48207

MARTIN L WEISSMAN MD
15822 FAIRFAX
SOUTHFIELD MI 48075

FREDRICK WEISSMAN MD
20905 GREENFIELD RD
SOUTHFIELD MI 48075

JOHN H WELCH MD
18550 W OUTER DR
DEARBORN MI 48128

WILLIAM R WELHAF MD
22101 MOROSS RD
DETROIT MI 48236

HERSCHEL J WELLS MD
WAYNE CO GEN HOSP
ELOISE MI 48132

MARTHA L WELLS MD
584 PILGRIM RD
BIRMINGHAM MI 48009

GARY J O WELSH MD
3535 W 13 MILE RD
ROYAL OAK MI 48072

MILFORD E WENOKUR MD
26070 MEADOW DR
FRANKLIN MI 48025

JACOB F WENZEL MD
18555 E WARREN
DETROIT MI 48236

PETER P WERLE MD
62 GREENBRIAR LANE
GROSSE PTE SHORES MI 48236

WM J WERTZ MD
20101 JAMES COUZENS
DETROIT MI 48235

HOWARD G WEST MD
12739 PURITAN
DETROIT MI 48227

BERNARD WESTON MD
20403 SNOWDEN CT
DETROIT MI 48235

EARL E WESTON MD
18101 JAS COUZENS HWY
DETROIT MI 48235

HORACE L WESTON MD
15901 W NINE MILE
SOUTHFIELD MI 48075

BURT T WEYHING MD A
18700 MEYERS RD
DETROIT MI 48235

NEIL J WHALEN MD L
1553 WOODWARD AVE
DETROIT MI 48226

ROBERT L WHALEY MD
3150 SECOND AVE
DETROIT MI 48201

THOS V WHARTON MD L
1809 OAK ST
WYANDOTTE MI 48192

BRUCE T WHEATLEY MD
26451 RYAN ROAD
WARREN MI 48091

CHARLES E WHEATLEY MD A
4407 ROEMER
DEARBORN MI 48126

STEWART C WHEELER MD
18901 W MC NICHOLS RD
DETROIT MI 48219

JOS L WHELAN MD
28 W ADAMS AVE
DETROIT MI 48226

DONALD H WHITE MD
20685 MERIDIAN
GROSSE ILE MI 48138

JACOB E WHITE MD
3413 MCDOUGALL
DETROIT MI 48207

MILTON W WHITE MD
1439 E OUTER DR
DETROIT MI 48234

PROSPER D WHITE MD
58 W ADAMS AVE
DETROIT MI 48226

THEODORE M WHITE MD
7341 W WARREN
DETROIT MI 48210

LESTON S WHITEHEAD MD
1553 WOODWARD AVE
DETROIT MI 48226

WALTER K WHITEHEAD MD L
17800 E EIGHT MILE RD
DETROIT MI 48236

FRED W WHITEHOUSE MD
2799 W GRAND BLVD
DETROIT MI 48202

ROBT K WHITELEY MD
608 EASTLAND PROF BLDG
DETROIT MI 48225

EDWARD H WHITELOCK MD
1809 OAK ST
WYANDOTTE MI 48192

JAMES E WHITMAN MD
3920 E EIGHT MILE RD
DETROIT MI 48234

ALFRED H WHITTAKER MD L
3 ELMSLEIGH LANE
GROSSE PTE MI 48230

JAMES I WHITTEN MD
14500 W MCNICHOLS RD
DETROIT MI 48235

STANLEY WICHA MD
1232 GENEVA
DEARBORN MI 48124

HENRY E WIECHOWSKI MD
10345 JOSEPH CAMPAU
DETROIT MI 48212

ISRAEL WIENER MD
13011 W MC NICHOLS RD
DETROIT MI 48235

MORTON J WIENER MD
1253 TWIN MAPLES LN
BIRMINGHAM MI 48010

FRED K WIETERSEN MD
18700 MEYERS RD
DETROIT MI 48235

EDWARD S WIKIERA MD
15120 MICHIGAN
DEARBORN MI 48126

LESLIE F WILCOX MD L
505 MIDDLESEX RD
GROSSE PTE PARK MI 48236

RUDOLF E WILHELM MD
751 S MILITARY RD
DEARBORN MI 48124

SEYMOUR K WILHELM MD
13011 W MC NICHOLS
DETROIT MI 48235

ARTHUR P WILKINSON MD R
615 N LAKESIDE DR
LAKE WORTH FL 33460

DELFORD G WILLIAMS MD
5050 JOY RD
DETROIT MI 48204

EARL R WILLIAMS MD
4407 ROEMER
DEARBORN MI 48126

EUGENE R WILLIAMS MD
6246 CHASE RD
DEARBORN MI 48126

EUGENE W WILLIAMS MD
6246 CHASE RD
DEARBORN MI 48126

JOHN H WILLIAMS MD
18633 MACK AVE
DETROIT MI 48236

JOSHUA S WILLIAMS MD
5050 JOY RD
DETROIT MI 48204

W A WILLIAMSON MD
17130 SCHAEFER
DETROIT MI 48235

WM A WILLOUGHBY MD
974 FISHER BLDG
DETROIT MI 48202

HARVEY I WILNER MD
HARPER HOSPITAL
DETROIT MI 48201

FREEMAN M WILNER MD
15001 W EIGHT MILE RD
DETROIT MI 48235

IRVIN A WILNER MD
17701 W MCNICHOLS RD
DETROIT MI 48235

ANDREW G WILSON MD
26711 SOUTHFIELD
LATHRUP VILLAGE MI 48075

FRANCIS M WILSON MD
DEPT OF MEDICINE
HUTZEL HOSPITAL

DETROIT MI 48201

GERALD S WILSON MD
3011 W GRAND BLVD
DETROIT MI 48202

MERTON C WILSON MD
15439 HARPER AVE
DETROIT MI 48224

PAUL H WILSON MD
901 W GRAND BLVD
DETROIT MI 48208

ROBERT F WILSON MD
DETROIT RECEIVING HOSP
DETROIT MI 48226

HELMUT WIMMER MD
1337 JOLIET PL
DETROIT MI 48207

ARLENE V WINFIELD MD
WAYNE COUNTY GEN HOSP
ELOISE MI 48132

HELEN H WINKLER MD
445 NEFF ROAD
GROSSE PTE MI 48230

LAWRENCE C WINNICK MD
13340 W 7 MILE RD
DETROIT MI 48235

GEO J WINTON MD
1150 GRISWOLD ST
DETROIT MI 48226

EDWARD A WISHROPP MD L
20250 MACK
GROSSE PTE MI 48236

GRANT J WITHEY MD
719 NEW CENTER BLDG
DETROIT MI 48202

ARTHUR A WITTENBERG MD
7101 W CHICAGO BLVD
DETROIT MI 48204

D H WITTENBERG MD
1535 E STATE FAIR
DETROIT MI 48203

SYDNEY S WITTENBERG MD
4400 LIVERNOIS AVE
DETROIT MI 48210

JOS A WITTER MD
1745 TIVERTON RD #23
BLOOMFIELD HILLS MI 48013

MORRIS WITUS MD A
3140 S OCEAN DR #1505
HALLANDALE FL 33009

A J WLODARCZYK MD
3215 W LONG LAKE RD
ORCHARD LAKE MI 48033

JOHN N WOLFE MD
432 E HANCOCK
DETROIT MI 48201

STANLEY B WOLFE MD
18510 MEYERS RD
DETROIT MI 48235

BONNIE R WOLFRAM MD
620 NEW CENTER BLDG
DETROIT MI 48202

WM Q WOLFSON MD
3000 SEMINOLE
DETROIT MI 48214

JOSEPH WOLODZKO MD
32900 FIVE MILE RD
LIVONIA MI 48154

MELISANDE WOMACK MD
1800 TUXEDO
DETROIT MI 48206

KIAN H WONG MD
10151 MICHIGAN
DEARBORN MI 48126

ALFRED L WOOD MD
23100 CHERRY HILL
DEARBORN MI 48124

DOUGLAS J WOOD MD
2860 CLARK AVE
DETROIT MI 48210

KENNETH A WOOD MD
3800 WOODWARD AVE
DETROIT MI 48201

WILFORD C WOOD MD L
3011 W GRAND BLVD
DETROIT MI 48202

RALPH F WOODBURY MD
21223 MACK
GROSSE PTE MI 48236

BERNARD J WOODLEY MD
3700 WEST RD
TRENTON MI 48183

JOSEPH J WOODS M D
23871 W MCNICHOLS
DETROIT MI 48219

FREDK M WORLEY JR MD
987 E JEFFERSON
DETROIT MI 48207

CALIER H WORRELL MD
20250 MACK
GROSSE PTE WOODS MI 48236

JOS J WORZNIAK MD
2312 BIDDLE AVE
WYANDOTTE MI 48192

WINSTON R WREGGIT MD
17 COLORADO AVE
HIGHLAND PARK MI 48203

CHARLES H WRIGHT MD
50 WESTMINSTER
DETROIT MI 48202

CLYDE YING CHAU WU MD
22190 GARRISON #300
DEARBORN MI 48124

RUDOLPH A WYATT MD
2785 S FORT ST
DETROIT MI 48217

JAN WYBRANOWSKI MD
17644 W WARREN
DETROIT MI 48228

ROBERT WYLIN MD
HARPER HOSPITAL
DETROIT MI 48201

RAYMOND L WYSOCKI MD
2536 RUTLEDGE
TRENTON MI 48183

JOSE E YANEZ MD
1400 CHRYSLER EXPWY
DETROIT MI 48207

RODOLFO YAPCHAI MD
20927 KELLY RD
E DETROIT MI 48021

ARA YARJANIAN MD
3815 PELHAM RD
DEARBORN MI 48124

MORTON I YARROWS MD L
455 MEDBURY ST
DETROIT MI 48202

ARTHUR J W YATES MD
16355 E JEFFERSON
GROSSE PTE PARK MI 48236

H G YESAYIAN MD L
609 KALES BLDG
DETROIT MI 48226

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Sept. 24-29, Detroit

1973—Oct. 7-11, Detroit

1974—Oct. 6-10, Detroit

1975—Oct. 5-9, Detroit

1976—Oct. 3-7, Grand Rapids

Handy List of Some Often-Used Addresses:

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  Washington Office: 1776 K Street NW, Washington, DC. 20006

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  Theodore Lopushinsky, PhD, Acting Program Coordinator

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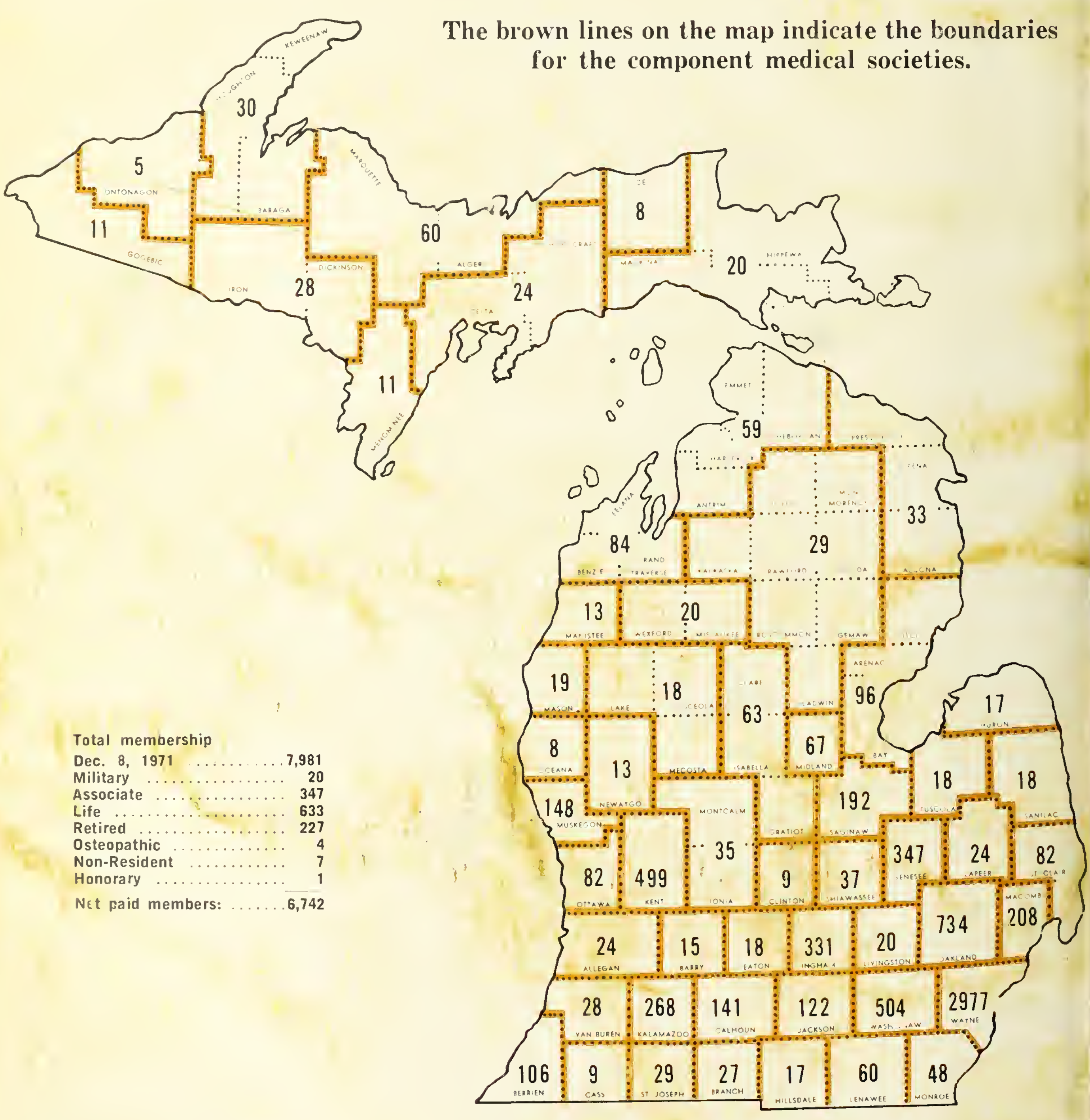
The brown lines on the map indicate the boundaries for the component medical societies.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SHIAWASSEE
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BARRY
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VAN BUREN
KALAMAZOO
CALHOUN
JACKSON
WASHTENAW
WAYNE
106
9
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27
17
60
48
BERRIEN
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Dec. 8, 1971	7,981
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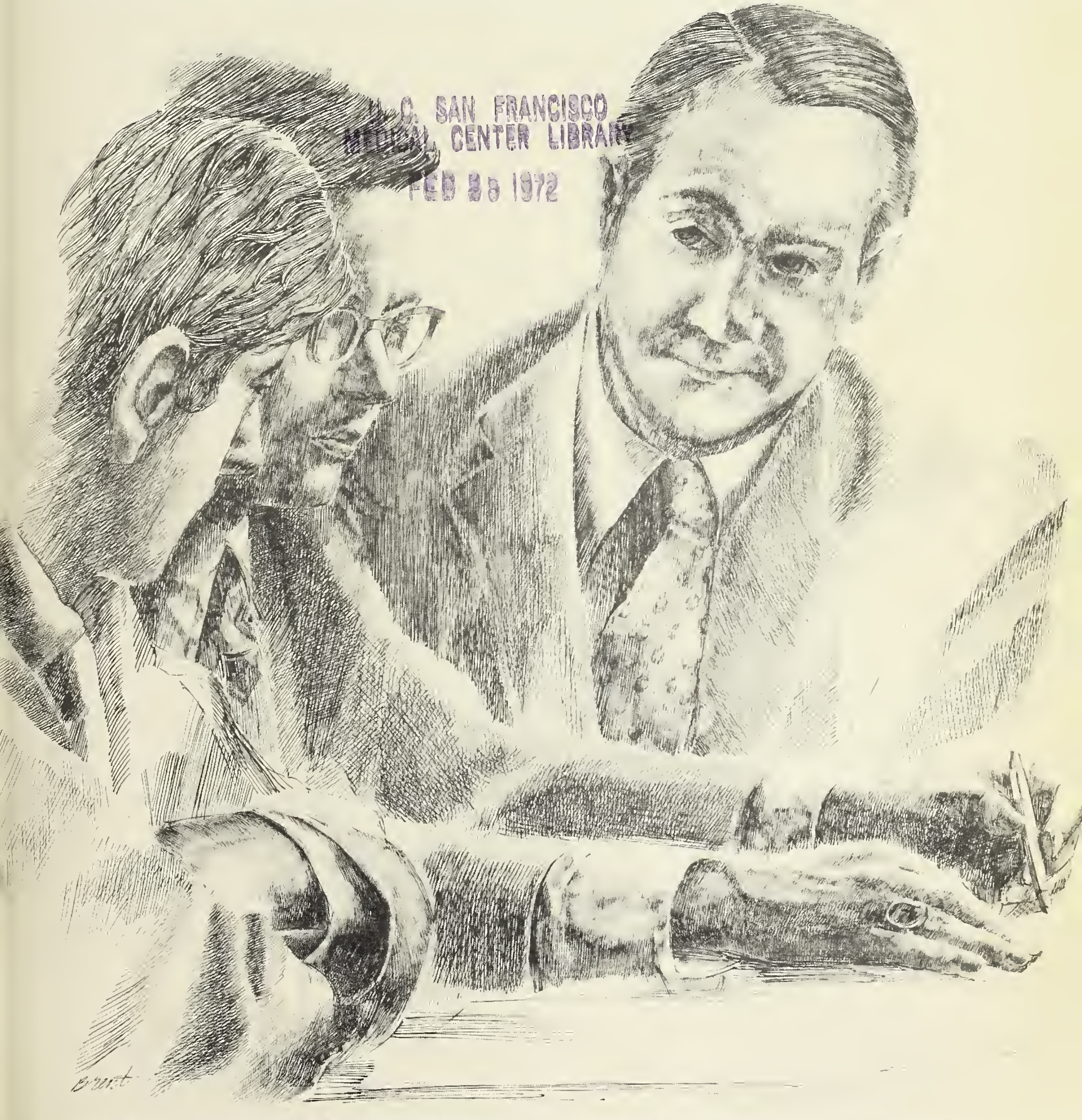
Non-Resident	7
Honorary	1
Net paid members:	6,742

Michigan Medicine

OFFICIAL JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY • VOLUME 71, NUMBER 5 • FEBRUARY, 1972

Focus on Foundations



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First spring meeting • MSMS House of Delegates • March 20-21, Detroit

See also news story on spring House of Delegates meeting, page 81; MSMS leaders discuss foundation in "Your opinion please" section, page 87.

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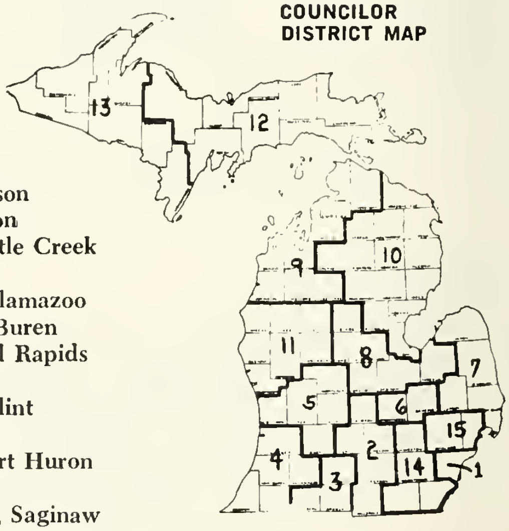
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Democratic national policy council hears Doctor Masters

Six major Michigan medical needs were identified in Detroit January 12 in testimony before the national Democratic Policy Council by MSMS Council Chairman Brooker L. Masters, MD, Fremont.

Doctor Masters cited these Michigan health needs:

1. Michigan medical schools should be enlarged.

2. Michigan needs more family physicians.

3. The distribution of physicians must be improved.

4. There must be more preventive medicine.

5. There must be improvements in current governmental health programs.

6. Physicians must be permitted, as they are now, to practice medicine in many different ways.

Doctor Masters was critical of "political parties, candidates and the elected representatives who have not generally sought the views of practicing physicians on health issues." "These doctors who actually see patients every day can accurately evaluate the problems and suggest possible workable solutions," Doctor Masters stressed.

"MSMS is dedicated to working for further improvements. Toward this end, Michigan doctors are prepared to work with any responsible political force," Doctor Masters said.

After the statement by Doctor Masters, the leaders of the Democratic Policy Council expressed their appreciation. They voiced their sincere thanks that the medical society had accepted their invitation and that the physicians had helped to identify health needs and had described efforts of the doctors. There was a 15-minute question and answer period. Doctor Masters was joined for the question period by Donald N. Sweeny, Jr., MD, member of the MSMS Council and a delegate to the AMA.

The testimony of the Michigan State Medical Society, Doctor Masters pointed out, dealt with with Michigan issues because the American Medical Association will discuss national health concerns before the national Democratic party platform committee later.

MSMS House, in first spring session, to discuss foundation

Consideration of the proposed medical foundation for Michigan will be the major subject for the first spring meeting of the MSMS House of Delegates in Detroit, Monday and Tuesday, March 20-21.

The meeting will be held at the Detroit Hilton. The delegates at the fall session voted that hereafter the House also will hold a spring meeting.

The foundation idea was proposed to the 1970 House of Delegates by Ralph Cooper, MD, Detroit, member of the MSMS Council. The resolution was adopted to ask the Council to investigate the desirability of forming a medical foundation.

The Council requested the Committee on Utilization Review and Health Insurance to study the concept and the committee with legal counsel developed a set of proposed bylaws. The bylaws were revised several times and Draft #5 was sent to the MSMS House of Delegates last fall. The reference committee had a lively session and the House asked the Council to reconsider several further revisions.

The Committee on Utilization Review and Health Insurance rewrote parts and the Council sent Draft #6 to all delegates for their comments. The replies were studied and the committee presented Draft #7 to the Council on January 26 and it was sent on to the House for its consideration in March.

This issue of *Michigan Medicine* contains several different viewpoints about the Foundation proposal in the "Your Opinion Please" section of this issue. *(See page 87).*

A question-and-answer feature will be carried in the March issue.

The MSMS House will be prepared to handle other resolutions and matters of business as presented by the delegates. Vernon V. Bass, MD, Saginaw, will preside again as speaker and James D. Fryfogle, MD, Detroit, will return as vice speaker.

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MICHIGAN MEDICINE is the official organ of the Michigan State Medical Society, published under the direction of the Publication Committee. Published Semi-Monthly, Trimonthly in January and December; 26 issues, by the Michigan State Medical Society as its official journal. Second class postage paid at East Lansing, Mich. and at additional mailing offices. Yearly subscription rate, $9.00; single copies, 80 cents. Additional postage: Canada, $1.00 per year; Pan-American Union, $2.50 per year; Foreign, $2.50 per year. Printed in USA. All communications relative to manuscripts, advertising, news, exchanges, etc., should be addressed to Judith Marr, Michigan State Medical Society, 120 West Saginaw Street, East Lansing, Michigan 48823. Phone Area Code 517, 337-1351.

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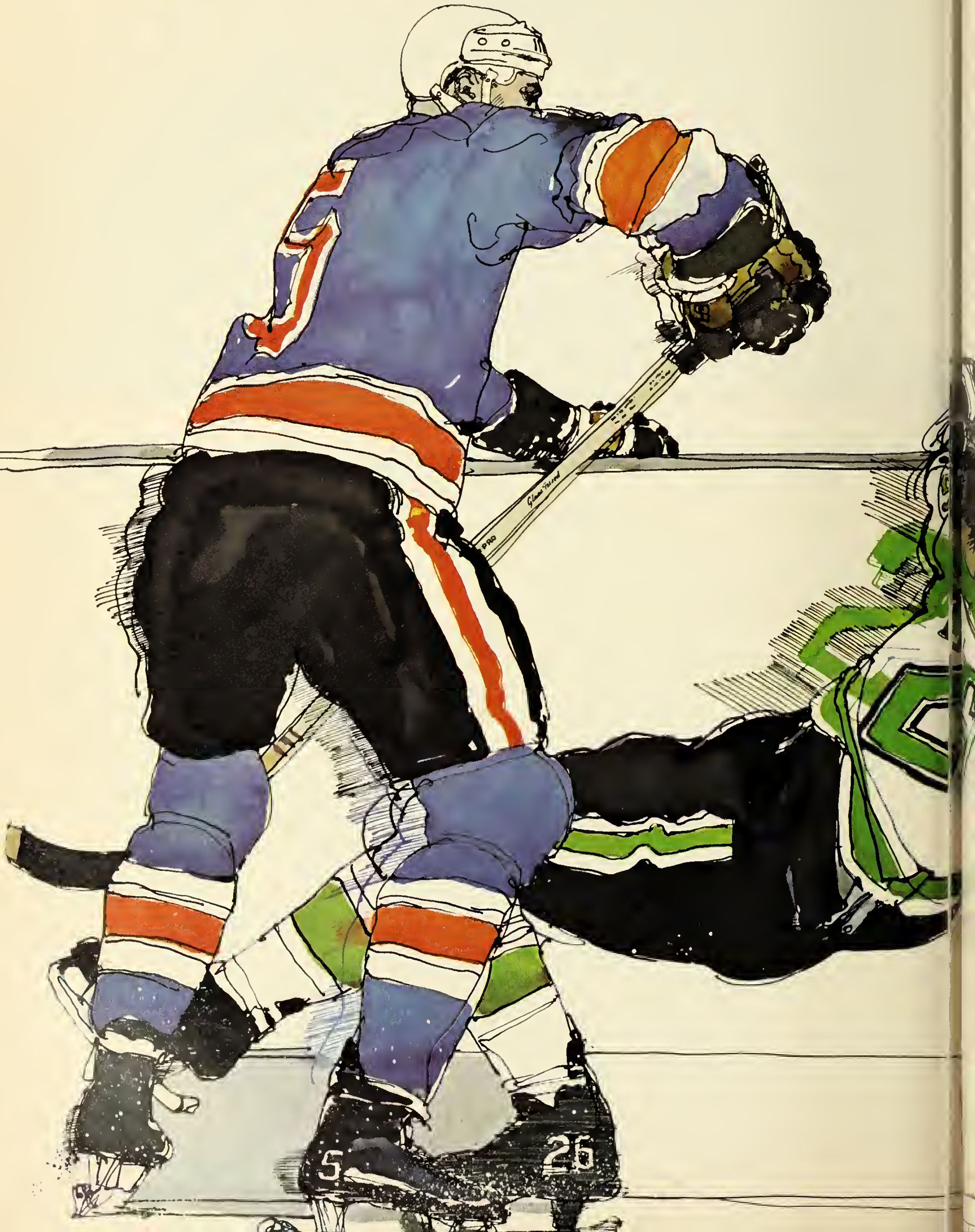

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Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

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Your opinion please

MSMS asked the question:

"The MSMS House of Delegates will consider the final draft of the articles of incorporation and bylaws for the proposed MSMS Foundation at its Spring Meeting. The proponents see the Foundation as the best method of leaving peer review in the hands of the physicians. What do you think? And what other functions do you suggest the Foundation serve in the future?

(The main purpose of the MSMS Foundation will be to negotiate contracts with the State of Michigan for Medicaid, Blue Shield and commercial health insurers, to set norms of optimal medical care in hospitals and in offices, and to review cases falling outside the norms.)

These doctors replied:

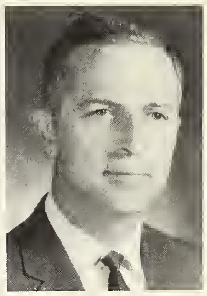
Sidney Adler, MD
Detroit

There would appear to be some very persuasive reason for interposing a corporation between the State Medical Society and the Physicians of Michigan. At this point, I do not know what the reason is. I read in the Special Report the statement that otherwise the Society's tax exempt status would be put in jeopardy. I question whether this is so. If the activity is of the type which results in tax liability, I think the result is the same whether the Society sponsors a corporation or whether the Society engages in the activity. I would want to see an opinion from a tax expert before I conclude that the foundation gimmick results in different tax consequences.

More importantly, I would want to see a compelling policy consideration for putting what purports to be an agency of the Society out of reach and out of the control of the House of Delegates. The House is more or less democratically chosen and representative of physicians, and if physicians' utilization and charges are to be controlled, I would rather see that control exercised under the supervision of the House than by an autonomous agency once or twice removed.

I see no reason why a contract with government agencies and carriers should not be made with the Society; why it is necessary to have some body removed from the Society enter into the contract. The fact that personnel will be needed is no obstacle, the Society has had no problem paying for the personnel it now employs.

Doctor Adler



Doctor Coury

Moreover, both the peer review and the utilization review projects are tied in with HMO's under HR1. Item 11 of the report of the Senate Finance Committee's staff questions addressed to HEW, with responses of HEW, September 27, 1971, is attached. It looks very much to me that until we have learned to walk on water, the subject is one that should be approached with much more caution than the sponsors of our foundation have displayed.

(Doctor Adler is MSMS president. His remarks are taken from an editorial in the Detroit Medical News, *Nov. 15, 1971.)*

John J. Coury, MD
Port Huron

Many of our colleagues are fearful and distrusting of an MSMS Foundation. They fear it will be too regulatory, repressive, rigid, impersonal and not representative.

I feel that the formation of a strongly organized, democratically structured and operative MSMS Foundation is necessary for the protection of a dedicated profession.

The MSMS Foundation should have as its primary and basic function that of peer review by and for physicians. Unless peer review is conducted by physicians, it can no longer be termed peer review. There is no other individual or group having the qualifications to conduct peer review of physicians.

A strong Foundation will not be pressured by governmental or third party agencies to establish rigid modalities of treatment for all medical and surgical problems. It is also my sincere hope that said parties will not attempt to enforce *under* utilization in order to keep down health care costs.

To meet these problems, it is necessary that

(Continued on page 90)

In acute gonorrhea

(urethritis, cervicitis, proctitis when due to susceptible strains of N. gonorrhoeae)

Sterile Trobicin®
(spectinomycin dihydrochloride pentahydrate)—For Intramuscular injections, 2 gm vials containing 5 ml when reconstituted with diluent. 4 gm vials containing 10 ml when reconstituted with diluent.
An aminocyclitol antibiotic active *in vitro* against most strains of *Neisseria gonorrhoeae* (MIC 7.5 to 20 mcg/ml). Definitive *in vitro* studies have shown no cross resistance of *N. gonorrhoeae* between Trobicin and penicillin.

Indications: Acute gonorrheal urethritis and proctitis in the male and acute gonorrheal cervicitis and proctitis in the female when due to susceptible strains of *N. gonorrhoeae*.

Contraindications: Contraindicated in patients previously found hypersensitive to Trobicin. Not indicated for the treatment of syphilis.

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Warnings: Antibiotics used to treat gonorrhea may mask or delay the symptoms of incubating syphilis. Patients should be carefully examined and monthly serological follow-up for at least 3 months should be instituted if the diagnosis of syphilis is suspected.

Safety for use in infants, children and pregnant women has not been established.

Precautions: The usual precautions should be observed with atopic individuals. Clinical effectiveness should be monitored to detect evidence of development of resistance of *N. gonorrhoeae*.

Adverse reactions: The following reactions were observed during the single-dose clinical trials: soreness at the injection site, urticaria, dizziness, nausea, chills, fever and insomnia.
During multiple-dose subchronic tolerance studies in normal human volunteers, the following were noted: a decrease in hemo-

Trobicin®

sterile spectinomycin dihydrochloride pentahydrate, Upjohn

single-dose intramuscular treatment

High cure rate:* 96% of 571 males, 95% of 294 females
(Dosages, sites of infection, and criteria for diagnosis and cure are defined below.)**

Assurance of a single-dose, physician-controlled treatment schedule

No allergic reactions occurred in patients with an alleged history of penicillin sensitivity when treated with Trobicin, although penicillin antibody studies were not performed

Active against most strains of Neisseria gonorrhoeae in vitro (M.I.C. 7.5-20 mcg/ml)

A single two-gram injection produces peak serum concentrations averaging about 100 mcg/ml in one hour (average serum concentrations of 15 mcg/ml present 8 hours after dosing)

Note: Antibiotics used in high doses for short periods of time to treat gonorrhea may mask or delay the symptoms of incubating syphilis. Since the treatment of syphilis demands prolonged therapy with any effective antibiotic, and since Trobicin is not indicated in the treatment of syphilis, patients being treated for gonorrhea should be closely observed clinically. Monthly serological follow-up for at least 3 months should be instituted if the diagnosis of syphilis is suspected. Trobicin is contraindicated in patients previously found hypersensitive to it.

Data compiled from reports of 14 investigators. **Diagnosis was confirmed by cultural identification of *N. gonorrhoeae* on Thayer-Martin media in all patients. Criteria for cure: negative culture after at least 2 days post-treatment in males and at least 7 days post-treatment in females. Any positive culture obtained post-treatment was considered evidence of treatment failure even though the follow-up period might have been less than the periods cited above under "criteria for cure" except when the investigator determined that reinfection through additional sexual contacts was likely. Such cases were judged to be reinfections rather than relapses or failures. These cases were regarded as non-evaluatable and were not included. JA72 1848-6

globin, hematocrit and creatinine clearance; elevation of alkaline phosphatase, BUN and SGPT. In single and multiple-dose studies in normal volunteers, a reduction in urine output was noted. Extensive renal function studies demonstrated no consistent changes indicative of renal toxicity.

Dosage and administration: Keep at 25°C and use within 24 hours after reconstitution with diluent.
Male—single 2 gram dose (5 ml) intramuscularly. Patients with gonorrheal proctitis and patients being re-treated after failure of previous antibiotic therapy should receive 4 grams (10 ml). In geographic areas where antibiotic resistance is known to be prevalent, initial treatment with 4 grams (10 ml) intramuscularly is preferred.
Female—single 4 gram dose (10 ml) intramuscularly.

How supplied: *Vials, 2 and 4 grams—with ampoule of Bacteriostatic Water for Injection with Benzyl Alcohol 0.9% w/v.* Reconstitution yields 5 and 10 ml respectively with a concentration of spectinomycin dihydrochloride pentahydrate equivalent to 400 mg spectinomycin per ml. For intramuscular use only.
Susceptibility Powder—for testing *in vitro* susceptibility of *N. gonorrhoeae.*

Human pharmacology: Rapidly absorbed after intramuscular injection. A two-gram injection produces peak serum concentrations averaging about 100 mcg/ml at one hour with 15 mcg/ml at 8 hours. A four-gram injection produces peak serum concentrations averaging 160 mcg/ml at two hours with 31 mcg/ml at 8 hours.
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an MSMS Foundation be strong, well-organized and representative of a united profession.

A unified, independent profession delivering quality health care and subjecting itself to quality peer review is definitely a benefit to the public and the profession.

(Doctor Coury is MSMS president-elect.)

Doctor Prophater

Doctor Leitch

Robert C. Prophater, MD
Bay City

FOUNDATIONS are the salvation of the private practice of medicine—a BOLD statement, but nevertheless, in my opinion, a true statement. The time is now for a Foundation to become a reality in the State of Michigan.

The medical scene is changing rapidly with increasing third party involvement—government programs, Blue Shield and other insurance carriers.

What can be anticipated out of Washington in the form of legislation in this Congressional Session is a greater involvement of the US Government in the health care field.

In testimony on hearings regarding peer review—which have been going on for some time—the proponents of the Bennett amendment emphatically want medicine to police itself but they have stated if peer review is not performed actively it will be taken over by laymen.

At the present time we do not have an organization that can perform this function and I am certain that a separate organization is a necessity. It should include:

1) other health providers (who are not members of MSMS)
2) involvement in setting norms of medical care—in the hospital and office practice
3) the ability to negotiate peer review contracts with carriers for services performed by members
4) flexibility to handle problems that surely will face medicine in the future

We have peer review now, but it is limited mostly to hospital utilization. This is not facing the problem of quality medical care; the too frequent over-utilization of laboratory procedures; over-medication carried on outside the hospital, the frequency of office visits, injections properly used, and nursing and convalescent homes.

Other functions the foundation may have to deal with in the future:

1) involvement with HMO's
2) negotiating fees
3) deciding who will be medically attended under what program.

The medical scene is changing. No longer can a medical practitioner sit in his castle and have an uncomplicated physician-patient relationship. There is third party involvement, and increasingly more so, and we must be ready to meet the challenges as an organization working together for the preservation of the private practice of medicine. A foundation is an answer; but do not be misled into thinking this will be the panacea for solving all health care problems of the day.

Many other states have formed foundations under duress. Let's form a foundation for Michigan while we can anticipate and be ready for problems that medicine will be facing in the very near future.

(Doctor Prophater is chairman, MSMS Committee on Utilization Review and Health Insurance Problems.)

Robert M. Leitch, MD
Battle Creek

In today's medical community, peer review is a fact of life; not only because of recent legislation making it mandatory, but also from a practical standpoint for increasing quality of care, decreasing costs and offering both patient and physician the most effective climate in which to further their traditional relationship.

The principal question, then, would be how to conduct peer review in the fairest and most effective manner.

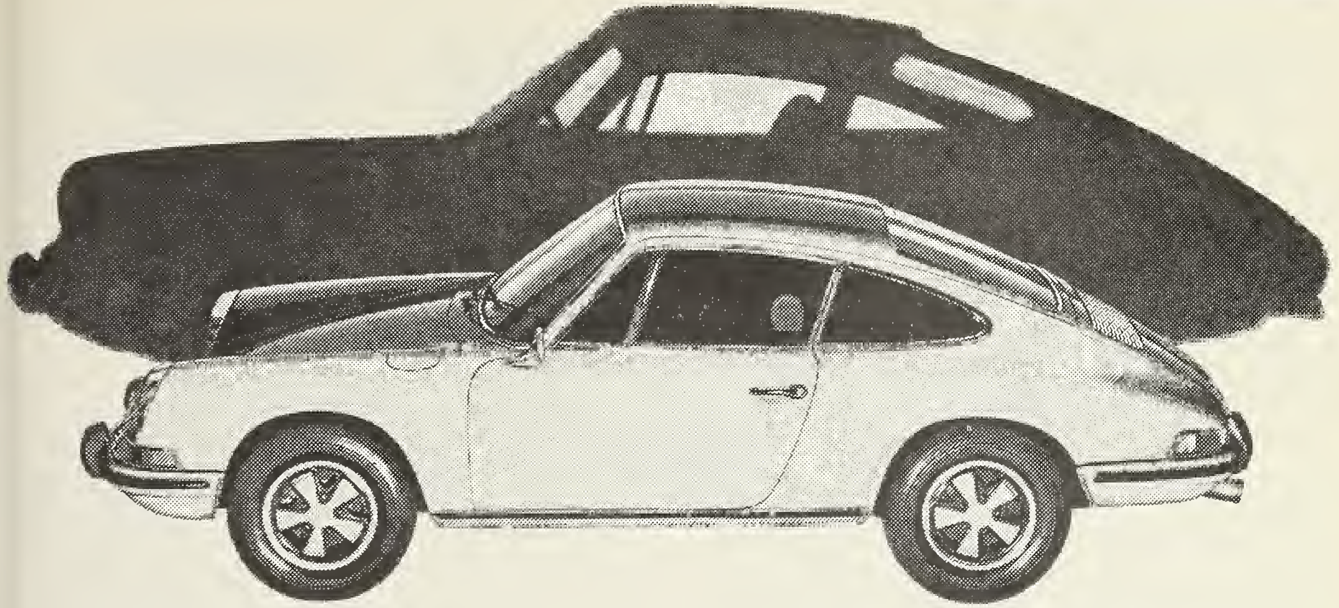
It should be unanimously agreed that the reviewing should be controlled and performed by one's peers on a voluntary basis with the reviewers appointed or elected by those being reviewed. At the same time, it should be free of the internal politics of medicine and also from outside pressures.

A separate organization, organized and sponsored by the medical profession would seem to offer the best mechanism for the conduct of peer review.

Such an organization would appear to be the "Foundation" now being developed by the Michigan

(Continued on page 92)

Porsche Audi: a division of Volkswagen



There is, of course, a dictionary difference.

But Dr. Ferry Porsche sees it another way.

Artist or engineer, there is always a result. And that result is always judged 2 ways: on idea, and on execution.

So it is under Dr. Ferry Porsche that we build the Porsche 911.

The idea was that a man should be able to transport himself in an exquisite piece of machinery, with enormous safety, ease and control.

The execution was the design, making, and assembly of thousands of parts of metal. And every part had to make a contribution to the idea.

This left no room for the normal tricks of car making.

It meant forming much of the car on workbenches, and finishing most of it by hand.

It meant ignoring the accountant's cry for cost reductions ("You can make this part cheaper and it'll be almost as good . . .").

It also meant we wouldn't just spot-check every 10th or 20th engine. (We run every one on the test bench before it's put in the car—then run it again on a test track before the car leaves the plant.)

The result is a car with incredible balance and performance. A car that has won repeatedly in competition racing—even beating cars with more powerful engines.

The 911 didn't win those races on the racetrack. They were won much earlier.

On idea. And execution.

"Leonardo da Vinci was considered first an artist, then an engineer. What is your opinion, Dr. Porsche?"

"Is there any difference?"

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State Medical Society and the Michigan Association of Osteopathic Physicians and Surgeons.

This foundation, with peer review its primary objective, would offer a broad base of support with participation from both MD's and DO's; it would reflect the proportions of MD to DO in the State as officers and committee members; it would offer a "united front" by the medical profession to any agency seeking peer review in this State. If the foundation had the solid backing of the MD's and DO's, which it must to succeed, it would preclude any attempts to foster other types of peer review efforts in Michigan.

An organization of this type would be in a position to study all aspects of health care delivery and should be able to make valuable contributions to the future of this difficult subject. Some of the objectives of area-wide health planning councils might well be best attained through foundation activity. Development of proper proportions of acute care, convalescent care and custodial care beds could well be done by an organization of doctors who should know better than any other group which patients belong in which type of facility.

The present condition of many patients occupying expensive acute care beds in general hospitals for long periods of time, because no suitable situation exists elsewhere, should cease. This is one of the major offenders in the high cost of care and one which can be improved upon. The practice of some patients shopping from doctor to doctor and from one hospital emergency room to another for unnecessary care could be detected and corrected by proper foundation activity. The occasional doctor who over-treats could be spotted and educated towards more standard forms of practice.

Time is running out for effective peer review in all its aspects to be initiated in Michigan and I feel that our proposed foundation, "Medical Programs, Inc.," offers the best opportunity to get into this field effectively.

(Doctor Leitch is vice chairman of the MSMS Council.)

Robert E. Rice, MD
Greenville

It would appear that the time is past for argumentation as to whether we should have a foundation. The necessity for one is amply clear to most, I am sure.

As we lay plans leading to the formation of a foundation, we still have the opportunity to consider how broad or narrow the function of the foundation should be. Too stringent restrictions of purpose could lead to stymying an otherwise usefully-constructed organization. On the other hand, the assumption of too many activities could result in responsible efforts receiving diluted attention or the performance of a number of services that are not very essential.

Doctor Rice

Doctor Jones

It might be helpful at the outset if we are able to specify the basic function that we consider the foundation should perform, and then be able to add other functions later if necessity dictates.

Our primary concern at the present time in forming a foundation is to provide a mechanism for the performance of peer review. Peer review has been properly defined as evaluation of medical factors by physicians, as contrasted with professional service review which is evaluation of medical factors by non-physicians (or physicians answerable to non-physicians).

To find peer review as more acceptable is certainly understandable. However, it seems rather ironic that the profession has been forced to consider the foundation concept as necessary as an alternative to professional service review which the profession considers unnecessary in the first place.

Peer review by foundation can be done, has been done and will be done—and we can do it if we desire. This will fulfill the requirements of review of physicians by physicians. All this is well and good, but it comes with a price. We will expect good quality men to perform these tasks. They can come only from the ranks of the busy and dedicated physicians who have plenty to do already. This type of activity is not calculated to win many friends and does not fit well with most professional attitudes. Participation and cooperation will be necessary to avoid this peer review resulting in an exercise in futility.

Professional service review would almost certainly result in profound beaurocratic meddling. We will have to see to it that peer review does not end up in professional bureaucratic meddling.

We were asked to comment on other possible functions for the foundation.

For some time I have felt that our state society should have a "business" arm. And more and more it seems this arm had better have some muscle. Since the law does not permit a society to engage in some of these "business" activities, it is obvious that we must be prepared to handle these activities by some additional or parallel structure.

Events have clearly shown that third parties, primarily governmental agencies or their agent, find the medical profession a fairly easy mark when it comes to the imposition of external decisions—and all this with a rather high imputation quotient. These scales would not tip so easily against us if we had more weight on our side of the balance. I would suggest that we acquire this muscle. It may be that a foundation is a logical arrangement for this acquisition.

(Doctor Rice is chairman of the MSMS Committee on Governmental Medical Care Programs.)

William S. Jones, Jr., MD
Menominee

It would be well for all to re-read the dynamic inaugural address of Dr. Sidney Adler, president of the Michigan State Medical Society. Read what he has to say about foundations and then think about it. I agree wholeheartedly with him.

So slight is the understanding of the political, moral, and social implications of this total health care package, to say nothing of the medical aspects, that to proclaim opposition to increased federal subsidy is to evoke approbation from a few and disdain from the majority.

For some reason we have a tremendous capacity for obscuring our problems. We appoint study committees, establish foundations, conduct endless polls, compile neat reports complete with multicolor charts and graphs, then approve recommendations of the committee without knowing anything about the issues. The proceedings are then published.

Patients are upset not only with the high cost of the total medical care package but with the all too often unavailability of this care. They are also displeased with the results. Just witness the epidemic of malpractice suits and the problem of obtaining malpractice insurance.

We as doctors have fostered much of the dissatisfaction by our affluence, by unavailability at times, and most certainly by some of the outrageous and unreasonable fee schedules. It's no wonder that the image of the doctor is collapsing and the credence in the AMA and MSMS is waning.

Perhaps peer review committees are necessary to curb the over-utilization of hospital beds, diagnostic X-rays, and laboratory tests as well as medication.

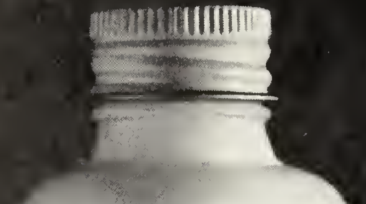
Let's not be deluded into thinking that this is educational. It's nothing but more committee work.

And don't think it's not punitive. This is what peer review is all about. This is an experiment in social engineering by the government to determine how best to manipulate all who are engaged in any endeavor of the health care field.

If forming a foundation is the only devious means of protecting the tax-exempt status of the Michigan State Medical Society in order to become a trade union so as to enter into collective bargaining, then I want no part of it. Why can't we re-tool our own society and not get everyone into the act. We're trying so desperately to catch up to the parade of life that we find we're out of step when we get there.

Perhaps we ought to be considering some means of re-cycling the total structure of all society because it's obvious that the rate of change of what the health consumer thinks he wants and what he's been told to expect far exceeds our capacity to deliver.

(Doctor Jones is immediate past president of the Menominee County Medical Society.)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Diabetic ketoacidosis in community hospitals:

Management and results of therapy

By Roger K. Ferguson, MD
East Lansing

Most reports of the results of treatment of diabetic ketoacidosis have originated from university medical centers or large teaching hospitals.[1-5] No survey of the modes and results of therapy of this common emergency in community hospitals has been published, to this author's knowledge. Yet there has been an increasing trend to utilize community hospitals for the training of physicians. Accordingly, the present review was undertaken to assess the experience of four community hospitals in comparison with other reported series.

Study Methods

All records coded with the primary diagnosis of diabetic acidosis (H-ICDA Code 250.2) were retrospectively reviewed in the four community hospitals. The patients were admitted during the period from January 1, 1970 to March 31, 1971. In addition, cases coded only diabetes mellitus (H-ICDA Code 250.0) during the same period also were sampled randomly to gauge coding specificity. Patients were considered to warrant the diagnosis of ketoacidosis if the following criteria were met:

Initial serum glucose was greater than 250 mg%.

Initial serum carbon dioxide content was less than 15 mEq/L.

Acetone was present in the urine and/or serum.

Sixty-three episodes in 45 patients met these criteria and 31 cases coded with this diagnosis were eliminated because of failure to meet the three criteria. Two of the 31 patients died, both of unrelated cardiac failure. Two cases included in this survey were coded diabetes mellitus (250.0) but met the criteria for inclusion.

Two hospitals each contributed 24 episodes to the survey, while the other two contributed nine and six cases, respectively. All laboratory studies reported in this review were done in the clinical laboratories of the four hospitals. Urine sugar was estimated with Clinitest® tablets. Urine and serum acetone were measured using Ketostix® or Acetest® methods. The serum glucose was determined by comparable methods in all laboratories. Serum carbon dioxide content was measured by the Natelson microgasometer or an AutoAnalyzer method. Serum Na+ and K+ were done by flame photometry; serum Cl— was performed with a chloridometer.

Results

Hospital Characteristics: All four hospitals are general admission facilities; one of the four is an Osteopathic Hospital. In 1970 the number of beds in each hospital in order of size was 465, 366, 211 and 184. During the same year there were 22,883, 13,085, 7,579 and 6,781 admissions to each of the hospitals, respectively.

Patient Characteristics: The average age of the 45 different patients at the time of their first admission in diabetic ketoacidosis was 34 years (range, three to 71 years). Twenty-one of the 45 patients were male. Eight of the patients were not previously known to have diabetes at the time of their first admission; six of these were under age 25. Five patients had multiple admissions; one patient each was admitted nine, seven and three times and two patients were admitted twice. Forty-six of the 63 cases were admitted to the hospital via emergency room.

Clinical Characteristics: Precipitating factors could not be determined or were not recorded in 38 of the episodes; the three most common con-

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The author is with the Departments of Medicine and Pharmacology of the College of Human Medicine, Michigan State University.

Table 1

Initial Serum Values in 63 Cases of Diabetic Ketoacidosis

Laboratory Test	Unit	Mean	Range
Serum Glucose	mg%	652	280-1900
Serum Sodium	mEq/L	133.9	125-164
Serum Potassium	mEq/L	4.8	3.1-8.3
Serum Chloride	mEq/L	99.3	84-119
Carbon Dioxide	mEq/L	9.6	2-14.5

tributing factors mentioned were "flu," gastroenteritis and omission of insulin. All the patients, except one, with known diabetes were taking insulin before their admission in ketoacidosis. Control of diabetes before admission was not ascertained in these patients. The most frequent symptoms were nausea, vomiting or increased thirst and the most common sign was hyperventilation. On admission six cases were recorded as comatose and 20, as stuporous or semicomatose; the state of consciousness in the remainder was judged as drowsy or alert.

Admission Laboratory Values: Initial serum values are summarized in **Table 1.** In 31 episodes acidosis was severe (serum CO_2 content <10 mEq/L). The mean serum glucose for this group was 701 mg%. Urine sugar was reported as 4+ in all but nine episodes. Urine acetone was recorded as "large" in 50 cases, "moderate" in the others. Serum acetone was reported as positive in various dilutions in 22 of the episodes.

Treatment: Regular insulin was administered in 61 of the 63 episodes; the other patients received NPH insulin. In two-thirds of the cases insulin was given in the emergency room or shortly after admission. The average initial dose of regular insulin was 56 units (range, five to 150 units); it was given subcutaneously or intramuscularly in 38 cases, intravenously in three cases and part subcutaneous and part intravenous in 20 cases. The average dose of insulin given in the first 24 hours was 184 units (range, 25 to 500 units). In slightly over half the cases, insulin to scale was administered on the basis of urine testing during the hospitalization. In 42 episodes longer-acting insulin was begun within 24 hours after admission.

Intravenous fluids were administered in all but one case. A wide variety of fluids was used, physiologic saline being most frequently employed (24 cases), followed by lactated Ringer's solution. The average amount of fluid infused in the first 24 hours was 3.4 liters with a range of 0.5 to 15 liters.

Potassium replacement was administered to 24 cases; in two of these the potassium was given by mouth. Amounts during the first 24 hours ranged from 20 to 200 mEq and averaged 53 mEq for the 22 cases receiving intravenous supplement. Alkali therapy was given in 35 episodes; the amount of sodium bicarbonate ranged from 20 to 250 mEq with an average of 70 mEq.

Results and Complications of Therapy: Hyperglycemia and acidosis were corrected in most cases within 12-18 hours. Correction was arbitrarily defined as a serum glucose less than 250 mg% and a serum carbon dioxide of 20 mEq/L or greater. The average hospital stay was 8.0 days for the cases that survived at least 24 hours.

The most common complication was hypoglycemia, occurring in eight patients in whom the blood sugar was 50 mg% or less and symptoms occurred. Hypokalemia was documented in two patients with serum potassium levels of 1.8 and 2.5 mEq/L; one of whom died following cardiac arrest. One patient developed hypernatremia (serum sodium, 197 mEq/L) and hyperosmolarity (428 mOsm/L), and one acquired a urinary tract infection following catheterization.

Death occurred in five patients; however, in three cases it could be directly attributed to other causes. Two patients died within 24 hours of admission from metastatic carcinoma of the prostate and massive pulmonary infarction and another patient who had had moderate proteinuria and bilateral B-K amputations for peripheral arterial disease, had a myocardial infarction three days after admission for ketoacidosis. Two patients, ages 11 and 35, expired in diabetic coma seven and 17 hours after admission. Both became comatose shortly after admission. The initial serum glucose levels were 1220 and 1400 mg%, respectively, while the initial serum CO_2 contents were 2 and 4 mEq/L. An autopsy performed on the younger patient showed marked cerebral edema; bilateral papilledema had been noted on admission.

Differences Among Hospitals: The patients and their clinical characteristics did not differ appreciably among the four hospitals. The mean laboratory values (**Table 1**) also did not differ significantly. With respect to therapy, one hospital was conspicuous because the average initial insulin dose was 87 units compared to 51 units for the other three hospitals. This difference tended to diminish for total insulin given in the first 24 hours. In addition, at this same hospital, 89% of the patients received intravenous KCl and $NaHCO_3$. There was no apparent difference in the results or complications of therapy between groups at each of the hospitals.

Discussion

In the past three decades there has been a marked decrease in mortality due to diabetic ketoacidosis. At one large city hospital mortality decreased from 43.7% to 16.4% in two five year periods 30 years apart.[6] In another[2] mortality declined from 31.4% to 14.5% in consecutive five year periods (1947-56). In 67 cases on the medical service of the Massachusetts General Hospital the mortality was 1.5% while at the Boston City Hospital 5.5% of 73 patients died. At a university medical center from 1964 to 1968 there were no deaths in 25 cases of diabetic ketoacidosis.[4] In a series of patients with severe ketoacidosis (CO_2 <10 mEq/L) there were 32 fatalities in 340 sequential episodes (9% mortality).[5]

All the above series originated from university medical centers or large teaching hospitals with house staffs and often special metabolic consultants. It has been suggested that a higher mortality rate might be expected in large city and community hospitals in which such supervision is not available.[3,7] No survey of the experience in community hospitals has been published, however.

It was decided therefore to review the modes and results of therapy in the four community hospitals of Lansing. Diagnostic criteria similar to those used in previous surveys were applied in this one.[1-4] In a 15-month interval 63 episodes of ketoacidosis in 45 patients satisfied the criteria. Comparison of the admission clinical characteristics of the patients resembled those in other series.[1-4] Furthermore, the initial laboratory values were within the ranges of those reported for these same series in patients not divided as to severity.[1,2,4,6]

In this series the patients in general were treated somewhat more conservatively than those in comparable series. The average insulin dose given initially and during the first 24 hours was appreciably less than that in other series.[1-4,6] Only one of the hospitals could be said to employ a high dose insulin regimen (average initial dose of 88 units in 9 patients).[9] Nonetheless, hyperglycemia and acidosis in most of the patients were controlled within 12 to 18 hours. Although slightly more than half of the patients received insulin to scale during their hospitalization, there also was a shift to longer-acting insulin within 24 hours in two-thirds of the cases. This perhaps was reflected in the average length of hospital stay of eight days for the patients who survived.

Lesser volumes of intravenous fluids also were infused in this as compared with recent series.[3-5] Of more interest, however, was the fact that only 24 cases (38%) received potassium chloride supplementation. Likewise, only 35 of the cases received alkali therapy as intravenous sodium bicarbonate. This would tend to indicate a conservative approach to the replacement of potassium and correction of acidosis. In the case of alkali replacement there would appear to be some basis for conservative use.[10]

As in most other series, hypoglycemia was the most frequent complication of therapy. This event did not seem to bear any relationship to the rate of correction of hyperglycemia or acidosis. It was more common in patients who received insulin to scale or in younger patients whose diabetes was difficult to control prior to admission. The development of hypokalemia was infrequent and did not bear any relationship to the administration of sodium bicarbonate or the initial serum potassium level.

Overall mortality was 7.9% for the 63 episodes, but only two deaths could be said to have resulted from uncomplicated diabetic ketoacidosis (3.1% mortality). These results are within the range of those reported in other series.[1-6]

Both patients who died with uncomplicated diabetic ketoacidosis were previously undiagnosed diabetics. Although a relationship between level of unconsciousness and mortality has frequently been noted,[3,6,8] it should be pointed out that neither of these patients was deeply comatose on admission. In both patients, there was marked hyperglycemia and severe acidosis. In the younger patient the blood sugar and CO_2 level were improving before death, but hypokalemia developed and she died in cardiac arrest.

Finally, a comment on the delivery of care to these patients in community hospitals. As was noted in the results, most of the patients entered the hospital through the emergency room and in almost all of these, initial treatment was given or begun by physicians there. Care then was generally transferred to other physicians. Although two of the hospitals had intern house staff, in general, they did not play a major role in the early management of the patients. Thus, it would seem that one factor that would account for these results might be the diagnosis and early treatment received in the emergency room. This explanation would be further supported if the results of a comparable series before the institution of the present emergency room systems were not as good.

Summary

The modes and combined results of therapy of diabetic ketoacidosis have been surveyed in four community hospitals. Overall mortality in the series was 7.9% but only two patients died of uncomplicated diabetic acidosis (3.1% mortality). The average hospital stay was eight days. These results compare favorably with those of series reported from large teaching hospitals and university medical centers.

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Acknowledgments

Grateful acknowledgment is made to medical records personnel for retrieval of the charts and to the hospital staffs for allowing them to be reviewed.

Monthly Surveillance Report

Cases of Certain Diseases Reported
To the Michigan Department of Public Health

For the Five-Week Period Ending December 31, 1971

MICHIGAN
DEPARTMENT
OF PUBLIC
HEALTH

	1971 This 5-Week Period	1970 Same 5-Week Period	1971 Total To Above Date	1970 Total Same Date	Total Cases for 1970
Rubella	101	129	2,955	3,012	3,012
Congenital Rubella Syndrome	0	0	1	2*	2
Measles	136	36	2,659	1,834	1,834
Whooping Cough	7	8	139	195	195
Diphtheria	1	0	1	0	0
Mumps	624	1,431	10,748	7,825	7,825
Scarlet Fever & Strep Sore Throat	1,303	1,598	11,244	11,863	11,863
Tetanus	4	0	7	8	8
Poliomyelitis (paralytic)	0	1	0	2	2
Hepatitis	440	441	4,828	4,594	4,594
Salmonellosis (other than S. typhi)	57	69	691	665	665
Typhoid Fever (S. typhi)	3	2	10	14	14
Shigellosis	66	31	295	225	225
Aseptic Meningitis	31	12	239	296	296
Encephalitis	8	13	108	155	155
Meningococcic Meningitis	5	4	64	69	69
H. Influenza Meningitis	7	10	82	61	61
Tuberculosis	141	181	1,824	1,957	2,006
Syphilis	555	442	4,689	3,900	3,900
Gonorrhea	2,167	2,170	22,115	20,676	20,676

Information can be supplied by the local health department on the local incidence of disease.

Maurice Reizen, M.D., Director
Michigan Department of Public Health

*Corrected total

Petit mal epilepsy – a closer look at an old malady

By V. N. Samuel, MD, MS
Detroit

Petit mal epilepsy as it is understood today, was first described by Tissot in 1772. The term "petit mal" was first used by the Parisian physicians of the 1800's to refer to any epileptic attack short of "grand mal." Friedman, in 1906, was one of the first to discuss petit mal at some length.

The name pyknolepsy for petit mal was coined by Adie in 1924 to describe "a disease with an explosive onset between the ages of 4 and 12 years, of very frequent, short, very slight monotonous minor epileptiform seizures of uniform severity, which recur almost daily for weeks, months, or years, are uninfluenced by anti-epileptic remedies, do not impede normal mental and physical development and ultimately cease spontaneously, never to return."

Of all the characteristics described above, the extreme frequency and the benign nature are the main features.

The first electro-clinical correlation of petit mal came in 1935 when Gibbs, Davis and Lennox recorded 3 per second spike and wave discharges with a crude ink-writing oscillograph known as the "undulator." In the past 36 years, in spite of modern technological advancement and our ability to record electrical activity of the brain at the cellular level, there has been very little progress in our understanding of the basic mechanism underlying seizure disorder. Part of the difficulty is due to an overabundance of investigation repudiating present theories without simultaneous efforts to supply new ideas.

In 1945, Lennox grouped three clinically different seizure types into the "petit mal triad" because they had similar EEG patterns: all appeared during childhood, were of short duration, and all responded to Tridione. Pyknolepsy, the first member of the triad, represents what is truly petit mal or absence. Myoclonic jerks and akinetic attacks, the second and third members of the triad are not generally considered to belong to the petit mal group. **Table 1** shows how petit mal fits into the general classification of other seizures.

Table 1

General Classification of Seizures

I. Centrencephalic Origin:
  A. Petit mal group
  B. Non-petit mal group
    1. Myoclonic Jerks
    2. Akinetic Attacks
    3. Grand Mal or Generalized Seizures
II. Temporal lobe origin—Psychomotor seizures
III. Cortical genesis—Focal seizures—motor or sensory
IV. ? ? —Unclassified seizures

The petit mal group includes pure petit mal, petit mal with focal components and petit mal with psychomotor components as shown in **Table 2**.

The above subdivision of petit mal should not be confused with the petit mal triad of Lennox. As shown in **Table 2**, petit mal is not always manifest as pure absence, but frequently occurs with psychomotor or focal components. Patients with psychomotor petit mal (PM psych.) may have clinical attacks which are hard to distinguish from psychomotor seizures. Simple or complex motor movements with mental changes such as seen in an automatism may be present. Patients suffering from petit mal with focal components (PM foc.) have deviation of the head and eyes to one side or movement of one extremity. Patients with petit mal complicated by focal or psychomotor components can be differentiated from those with pure focal (cortical) or psychomotor seizures (temporal lobe) by the uniformity and lack of evolution of the attacks and by the high frequency and brief duration of the attacks in the petit mal group.

Most patients with petit mal epilepsy experience 50 or more electrographic or subclinical seizures (also called larval seizures) for every clinical seizure that is manifest. When examined more closely, postural changes and clonic movements are

Table 2

Classification of Petit Mal Seizures

1. Pure petit mal: Corresponds to the definition of Pyknolepsy (Abbr. PM).
2. Petit mal with psychomotor components: May be present at the start of epilepsy or developed later (Abbr. PM psych.).
3. Petit mal with focal components: (Abbr. PM foc.).

Doctor Samuel is Associate Neurologist, Department of Neurology, Henry Ford Hospital, Detroit.

found in 60-70% of cases, usually consisting of minimal movements, rarely with complete loss of tone. Occasionally autonomic symptoms such as brief apnea, incontinence, pupillary changes and flushing are seen.

The actual incidence of petit mal is difficult to determine because there is so much chaos in the literature as to petit mal classification. Livingston found an incidence of only 2.3% in 15,000 epileptics. In Dalby's series of 346 patients, all with 3 per second spike and wave, 30% of these had pure petit mal, 55% had petit mal with psychomotor features, and 15% had petit mal with focal features. Both Dalby and Livingston found that males predominated over females in a ratio of about 60:40. It is estimated that 2-9% of petit mal patients have episodes of petit mal status.

Metrakos and Metrakos in 1961, studied the heredity of three per second spike and wave epilepsy. Their study included 211 patients with centrencephalic epilepsy without a neurological lesion to account for their seizures. Initially they felt that the first child would be more subject to birth trauma, but they found no correlation between birth trauma and petit mal epilepsy. They concluded that the centrencephalic type of EEG is the expression of an autosomal dominant gene with low penetrance at birth, nearly complete penetrance from four to 16 years, and then almost zero penetrance at 40 years.

The etiology of petit mal epilepsy is not well understood and most attempts to find significant structural abnormality have been unsuccessful. The number of petit mal patients found to have brain damage varies from 0-40% depending on the series. Among recent investigators Dalby's work is noteworthy. To see if brain damage is the etiology of petit mal, Dalby evaluated 346 patients by four criteria; known neurological disease, abnormal neurological examination, abnormal pneumoencephalogram, and an intelligence quotient of under 90. Using these criteria he found evidence of brain damage in 40% of his cases. A definite etiologic factor such as birth trauma or developmental anomaly could only be found in 1/3 of this 40 percent.

The EEG abnormality of petit mal occurs against normal background activity and consists of a sudden, generalized, bilaterally synchronous spike-wave discharges with an amplitude of up to 1000 microvolts and a frequency of 3 per second. The best montage to see petit mal activity is the reference run because it does not have the cancelling effect of bipolar runs. Focal activity may occasionally be found in petit mal, and when this occurs it is more often seen in patients with other seizure types complicating the petit mal. It is also true that in patients with abnormal background activity there is a greater incidence of grand mal seizures and some brain damage. According to Gibbs, sleep alters the spike-wave complex by making it shorter, more frequent, and more disorganized. Sometimes it is reduced to a single spike occurring every three to six seconds and is occasionally restricted to one cortical area. Other activation techniques include hyperventilation and photic stimulation. According to some authors 50% of cases respond to hyperventilation while only 13% to photic stimulation.

Gibberd in 1966 evaluated a number of factors related to termination of petit mal seizures and found that family history, sex, response to medication, EEG findings, and psychological state had no influence. However, he noted that those who eventually developed grand mal seizures had more abnormal background EEG activity and poor conthol of petit mal seizures with medication. An early onset of petit mal, high intelligence, positive family history, and a normal CNS examination according to some are factors which would make eventual development of grand mal epilepsy unlikely. Grand mal seizures seldom occur as a complication after the age of eighteen.

The drug of choice in the treatment of petit mal is ethosuximide (Zarontin). The other most common drug is trimethadion (Tridione).

In conclusion, it may be said that petit mal is a seizure pattern that can occur alone or with focal or psychomotor components. Its etiology is not well understood. There is evidence to indicate that it is transmitted as a dominant genetic defect. Even though significant structural abnormalities in the brain are lacking, there is reason to believe that brain damage may contribute to its production.

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Granulomatous Colitis

By William J. Foley, MD
Ann Arbor

When Crohn[1] described regional ileitis in 1932, he thought that the ileocecal valve acted as a barrier to distal progression of the disease. Two years later, other investigators pointed out that extension of regional enteritis into the colon could occur.[2,3,4]

Not until 1952, however, was it suggested that a granulomatous disease resembling regional enteritis could arise independently in the colon without any associated ileal disease.[5] In 1959 in England, Brooke,[6] and Morson and Lockhart-Mummery[7,8] described for the first time the clinical and morphologic characteristics of granulomatous colitis which distinguish it from ulcerative colitis.

On this side of the Atlantic, recognition of granulomatous colitis as an entity distinct from the ulcerative type has been slow in developing. This is true particularly among surgeons since internists and pathologists now seem more receptive to this concept. There is little doubt that the diagnosis of granulomatous colitis will be used with greater frequency in the near future.

To avoid confusion with terms such as regional enteritis of the colon, the British refer to this disease process as Crohn's disease of the colon. In America the term granulomatous colitis is preferred.

The purpose of this paper is to review briefly the current understanding of granulomatous colitis as it has evolved during the past 10 years.

Diagnosis

From the standpoint of pathologic changes, granulomatous colitis is a transmural inflammation. Initially, aggregates of lymphocytes form in the submucosa. Degeneration of the overlying mucosal cells follows, producing ulcers. Crypt abcesses and deep fissures then develop in the wall.[9] These fissures give rise to the fistulas that are so often seen with granulomatous intestinal disease, although less frequently in colitis than in regional enteritis.

The most significant histologic change occurs in the submucosa, which is thickened by edema and fibrosis. Lymphocytic aggregates and the characteristic sarcoid-like granulomas are seen scattered throughout all layers of the wall. Granulomas appear in regional lymph nodes in about one-fourth of cases and have also been noted in the liver.[10,11] The presence of a "sarcoid reaction," however, is not essential to the microscopic diagnosis; granulomas are absent in 30 to 45% of cases.[12,13]

The essential histologic findings, then, include ulcers dispersed between normal mucosa, a transmural inflammation with the submucosa thickened by edema and fibrosis, and lymphocytic aggregates.[8,9] Fissures also suggest the diagnosis of granulomatous colitis; these occur in 25 to 60% of cases.[9,14] This histologic pattern is to be distinguished from the inflammatory process of ulcerative colitis which tends to involve only the mucosa and submucosa, although extension deeper into the wall may be noted in acute fulminant episodes.

On gross examination the colon wall in granulomatous colitis is thickened and less pliable. Diseased segments of colon may be interspersed between normal areas. Ulcers and fissures connecting between areas of normal mucosa produce a "cobblestone appearance" of the mucosal surface. Strictures and narrowing of the lumen from fibrosis, and fistulas extending into the surrounding tissue, may be observed. The mesenteric lymph nodes are usually enlarged. Associated ileal disease is seen in 30 to 47% of cases, but the involvement need not be contiguous.[12,13]

From the clinical standpoint, diarrhea is the most frequent complaint, along with abdominal cramping in most cases. Bleeding, however, does not usually occur unless there is rectal involvement.[11] Weight loss and periodic fever are common. Acute fulminant episodes are unusual, and toxic megacolon is rare.[9,14,15,16]

The disease has a tendency to begin in the right colon and to spare the rectum—not more than 50% of cases show rectal involvement. Lockhart-Mummery[17] reported that in 80% of his cases, anal lesions developed during the course of the disease and sometimes were the initial complaint. He is of the opinion that when the rectum is diseased, the findings of granulomatous colitis at sigmoidoscopy can usually be distinguished from ulcerative colitis,

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Doctor Foley is a surgeon living in Ann Arbor. Please address reprint request to Dr. Foley at 1075 Barton Drive, Apt. 116, Ann Arbor, Mi 48105.

but not all investigators agree.[18] An increased incidence of carcinoma has not been reported in these cases. Regional enteritis and ulcerative colitis occur together only rarely, and it is likely that many cases diagnosed as such in the past may have been granulomatous ileocolitis.[17]

In radiographic studies, the distribution of disease often may suggest the diagnosis. Skip areas, right-sided disease, associated colitis and regional enteritis, and an uninvolved rectal segment favor a diagnosis of granulomatous rather than ulcerative colitis. On barium enema examination, findings commonly noted in granulomatous colitis are: (1) areas of narrowing, stenosis, and stricture; (2) sinuses and fistulas; (3) thickened colonic wall; (4) cobblestone mucosal pattern; (5) pseudodiverticula; and (6) spikes of barium, representing deep fissures, extending perpendicularly from the lumen.[17] Pseudodiverticula result from eccentric involvement of the colon wall, producing contraction of one side and an outpouching of the opposite normal wall.[19] Shortening of the colon and loss of a haustral pattern which are so characteristic of ulcerative colitis are less evident with granulomatous disease.

Treatment

As with regional enteritis, operation is indicated in granulomatous colitis for complications of the disease. Fistulas, obstruction, infection, and chronic debility are the most frequent indications; occasionally fulminating episodes require surgical intervention. About three-fourths of the patients reported by Lindner and his colleagues required operation.[18]

The recurrence rate following resection for regional enteritis is about 50%;[20] in some patients the recurrence involves the colon at the site of anastomosis with small bowel. The recurrence rate is high also for cases of localized granulomatous colitis treated by segmental resection of the colon.[21,22] Nevertheless, these procedures seem justified when all diseased areas can be excised and intestinal continuity preserved. Diversionary procedures are without value because the disease progresses and a second operation is required in practically every case.[21] Total colectomy and ileostomy for diffuse colonic disease, even when ileal involvement is present, has given good results. Goltzer et al.[22] were able to find only 6 recurrences reported in the literature after ileostomy and colectomy for granulomatous colitis when the type of operation could be determined from the data given.

Comment

The histologic, radiographic, and clinical picture that I have outlined describes "classic" granulomatous colitis as it appears at our present state of knowledge.

From a clinical standpoint, there is a practical value in differentiating granulomatous from ulcerative colitis whenever possible as the basis for more effective management. The most striking clinical features distinguishing granulomatous colitis are: (1) the insidious course, with acute exacerbation and toxic megacolon being unusual; (2) the tendency to form fistulas and the high incidence of anal disease; (3) the value of segmental resection for localized colonic disease in spite of the high recurrence rate because of the sphincter-preserving effect of these procedures; and (4) the fact that there is not an increased incidence of colonic carcinoma among these patients. Since total colectomy and ileostomy for granulomatous colitis has been followed by a very low incidence of recurrence in small bowel the outlook for patients is favorable following this procedure.

It must be kept in mind, however, that in some patients with non-specific colitis there is a blending of patterns of both the granulomatous and ulcerative types. A distinction useful to clinicians cannot always be made between these two forms of colitis. As such, cases of granulomatous colitis should be defined carefully whenever the clinician is to use this diagnosis as a basis for advising treatment and determining prognosis. Indeed, until the pathogenesis is better understood, there is no certain answer to the question of whether these two forms of colitis are in fact separate diseases.

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Drug therapy problems

By John Marien, RPh, MBA
Ann Arbor

Q. Is Cholera Vaccine safe to use in pregnant women? (C.S., Ann Arbor).

A. *Cholera Vaccine is the inactivated virus and produces few reactions. It may be given to patients of any age and to pregnant women.*

Q. What is the recommended dosage adjustment for the administration of cephalothin (Keflin®) I.V. in the presence of elevated serum creatinine? (J.T., Ann Arbor).

A. *For severe failure (creatinine clearance less than 10 ml. per minute), the dosage schedule should be adjusted to every 8-12 hours.*

Q. Why is the I.M. or I.V. route contraindicated with bethanechol (Urecholine®); (W.S., Ann Arbor).

A. *Violent cholinergic stimulation may cause collapse of the circulatory system. Because of this it is advisable when giving bethanechol S.Q. to have atropine sulfate 0.6 mg. ready for S.Q. or I.V. administration.*

Q. Can cyclophosphamide (Cytoxan®) be responsible for premature menopause? (C. C., Ann Arbor).

A. *Ovarian suppression with amenorrhea and hot flashes have been reported in some premenopausal women.*

Q. Will phenothiazines interfere with 5-hydroxyindole acetic acid tests? (B. S., Detroit).

A. *Yes, a false negative or diminished effect can result.*

Q. Is phenylbutazone dialyzable? (D. M., Ann Arbor).

A. *Yes, use of artificial kidney may be life saving for treatment of overdose. Also, phenylbutazone shows a pH dependent excretion in humans. It is excreted more rapidly in alkaline than acid environment.*

Q. Is Conray® excreted in breast milk? (W. B., Detroit).

A. *It is likely that it will be excreted since Conray® is an iodine-containing compound and iodine is excreted in breast milk.*

Q. What is the blood level of cephalexin (Keflex®) after a 500 mg. dose? (J. T., Ann Arbor).

A. *The range would be 7.5 to 25.0 mcg./ml. after one hour from fasting subjects.*

Pharmacist Marien is author of this monthly column. He is associated with the Drug Information Center of University Hospital. Stewart B. Siskin, Pharm.D, is supervisor of the Center.

Michigan authors

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Epidural blood patch

An unusual approach to the problem of post-spinal anesthetic headache

By Frank S. DuPont, MD
Raymond D. Sphire, MD
Detroit

Synopsis

Severe, incapacitating post-spinal anesthetic headache was effectively relieved, without any complications, in 40 post-partum patients by the administration of an epidural blood patch. The procedure consists of the injection of a small amount of autologous blood into the epidural space. The blood apparently seals the dural defect, preventing further loss of spinal fluid and thereby greatly assists in the restoration of normal cerebro-spinal hydrodynamics. Until wider experience with this procedure has been gained, it should be reserved for those cases of severe headache which seriously interfere with normal post-partum recovery.

"Epidural Blood Patch" is the somewhat euphemistic phrase being used to describe the relatively new treatment for post-lumbar puncture headache. The procedure involves the introduction of a small amount of autologous blood into the epidural space at the site of the original lumbar puncture. The concept of using autologous blood to seal the needle puncture opening in the dura mater was first proposed by Gormley in 1960.[1] In the intervening years his proposal has remained largely unnoticed or ignored and only a few papers have been published relative to this somewhat unusual approach to the treatment of spinal cephalalgia. Ozdil and Powell in 1965,[2] injected blood into the epidural space of dogs that had received dural punctures. Their work, including microscopic sectional study of the dura, demonstrated that effective sealing of the dural defect occurred in just a few hours. In 1970, DiGiovanni and Dunbar[3] reported on the clinical effectiveness of this method of treatment in a series of 50 cases of post-lumbar puncture headache.

Table 1

5. Direct Surgical Closure of Defect
Treatment of Post Lumbar-Puncture Headache

Symptomatic:
1. Analeptics
2. Analgesics
3. Ataractics
4. Antihistamines
5. Narcotics
6. Sedatives
7. I-V Local Anesthetics

Correction of Fluid Loss:
1. Abdominal Binders
2. Epidural injection of air, saline, glucose
3. Mineralocorticoids
4. Plugging of Dural Defect with Catgut

There is a certain unattractiveness to the idea of injecting blood into the epidural space to treat what is ordinarily a self-limiting condition and equally unattractive is the potential for infection, neurologic and other possible sequelae.

It is generally accepted that the classic headache which occurs following lumbar puncture is caused by a continuing loss of cerebrospinal fluid through the dural needle hole into the epidural space.[4]

Two theories explain the origin of the headache. The most common position states that the loss of cerebrospinal fluid allows the brain to sag when the patient assumes an upright position. This sagging places traction on the pain-sensitive supporting structures of the brain, e.g.—blood vessels. The second, less commonly accepted, theory states that the loss of cerebrospinal fluid causes reflex compensatory cerebral vasodilatation which in turn produces a "vascular type headache" caused by vessel wall and perivascular edema.

Treatment of the problem rests in the ability to restore normal cerebrospinal hydrodynamics.[5] Either by "stopping the leak" or by restoring the fluid volume to a degree that exceeds loss. **Table 1** indicates various methods used to date to accomplish this end.

None of these methods of treatment is entirely satisfactory and all have a high rate of failure.

Doctor DuPont is attending anesthesiologist and Doctor Sphire is director, Department of Anesthesiology, Detroit-Macomb Hospitals Association.

This is particularly true in the case of the severe incapacitating post-spinal headache.

The highest incidence of spinal cephalalgia occurs in the obstetrical patient.

In spite of faultless technique, utilizing very small gauge spinal needles, headache will occur in 2-20% of these patients and many of these will be of the incapacitating type.[6]

Early ambulation of post-partum patients is a sine qua non of good obstetrical practice. Its greatest value lies in the prevention of thrombo-embolic and respiratory complications. The occurrence of a severe incapacitating headache interferes with and often prevents early ambulation. This then represents a serious hazard to the patient's recovery.

Because of previous favorable experience with "epidural blood patch" by one of the authors (F.S.D.), it was decided to initiate a clinical study of the merits of this procedure as related to the Obstetrical Service of the Detroit-Macomb Hospitals Association.

Method

This series consists of 41 cases of severe headache following spinal anesthesia for either vaginal delivery or Cesarean section. The patients were referred to the Department of Anesthesiology for treatment by the attending obstetrician only after failure of conventional modes of therapy for at least three days, and because the headache was seriously interfering with post-partum recovery procedures. All patients in this series, except one, demonstrated the signs and symptoms of a classic post-spinal headache and were selected for the "patch" procedure. Prior to performing the "patch," the patients were fully informed as to the nature of the procedure and a consent was obtained.

Technique

With the patient in the supine position, using an aseptic technique, 10 cc's of blood is drawn from a suitable vein. This syringe is then carefully handled and secured so as to prevent its possible contamination.

The patient is then turned on her side and placed in the usual lumbar puncture position. Ordinarily, the same interspace as was used for the spinal anesthetic injection is selected for the epidural injection of blood. Usually the skin needle mark of the spinal injection is identifiable and this locates the appropriate interspace. In those cases where multiple needle marks are present, the interspace equidistant between the highest and lowest is selected for injection.

After scrupulous preparation of the back, epidural placement of either a 16 g. Tuohy or a 20 g. Crawford needle is accomplished using either the "hanging drop" or "loss of resistance" technique to identify the epidural space. Once the needle tip is properly located in the epidural space, the 10 cc's of previously drawn blood is slowly injected. Following removal of the needle, the patient is returned to the supine position.

Results

In this series a total of 42 epidural blood patches were performed, with one patient receiving a second patch.

With this procedure, almost complete relief of the headache was achieved following the injection of blood. Determination of relief was accomplished by asking the patient to sit up immediately after the injection, and it was unusual for this positional maneuver to induce a recurrence of the headache. In only two cases was the onset of relief delayed (two to four hours) and in all cases, except one, relief continued and was sustained by the next morning. The one failure to relieve headache, occurred in a patient in whom there was some question as to whether or not a typical post-spinal anesthetic was actually present. A consultant in neurosurgery examined the patient, and concluded that this was a true spinal headache, and suggested the patch procedure be performed.

In five of the "patch" procedures, inadvertent entry into the sub-arachnoid space occurred. In these cases, the needle was withdrawn and replaced in the epidural space and the blood was then injected. Complete relief followed in all these cases with no subsequent problems.

Complications

No unusual or significant complications were encountered in this series. Approximately one-fourth of the patients experienced mild discomfort of the back in the region of the epidural injection. This discomfort disappeared in approximately 12 to 36 hours, and was readily relieved by aspirin. In one case, the patient complained of a great amount of severe interscapular pain radiating into the arms, following the injection. This discomfort slowly disappeared and was completely absent the following day.

Comment

This is not a large series of cases, but we are greatly encouraged by the results and the absence of any major complications.

Infection is probably the most serious possible complication to be considered, but with proper care and aseptic technique, this should present no problem.

Based on the clinical results of this study, "epidural blood patch" is an effective treatment for post-spinal headache occurring in the post-partum patient. However, until wider experience has been gained with this procedure, it should be reserved for only those cases of severe incapacitating headache which seriously interfere with normal postpartum recovery and in which there has been no response to conventional therapy.

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Please send reprint requests to Doctor DuPont at 1420 St. Antoine St., Detroit 48226.

Perinatal Tips

By Paul M. Zavell, MD
Detroit

The following case from the files of the Wayne County Medical Society Perinatal Mortality Committee is presented as an aid in continuing education.

Maternal

This was the second pregnancy for this 28 year old, gravida II, para 1, O positive white mother. Estimated date of confinement was 10/9/70. After five hours, 40 minutes of labor (the first stage lasted five hours, 20 minutes; second stage 17 minutes, and third stage three minutes) she delivered at 10:07 p.m. on 10/10/70.

One hour before delivery she was given 50 mgm Demerol and 1/200 Scopalamine IM. Past history revealed three kidney infections but none with first or second pregnancies. First child alive and well. At this delivery she was given N_2O and O_2 as well as Xylocaine locally.

During her five days in the hospital she showed signs of a mild U.R.I. beginning on 10/11/70 (about 8 hours after delivery) with a raw throat and some coughing. Her temperature stayed normal at all times. Later, on 10/11/70, her obstetrician heard a few scattered crepitant rales at both bases and he started her on V-Cillin-K 250 mgm qid. She was sent home on 10/15/70 with three additional days on this medication. Her cough was treated with Benylin Expectorant. No studies other than those listed below were done.

10/10/70—Hgb=13.5 gm with 40.0 Vol % Hct
10/11/70—VDRL=Neg
10/12/70—Hgb=14.4 gm with 43.0 Vol % Hct

Fetal

The infant was a seven pound, 11 ounce white female with Apgar of 10 at one and five minutes. Other than a hasty exam in the delivery room (this was said to be "normal"), the infant was not seen until the morning of 10/11/70. The pediatrician noted nothing unusual. Cord blood was reported back then as O+ and Coombs Negative.

At about 30 hours of age (4 a.m. of 10/12/70) she vomited her half-strength formula (Similac). The vomitus was dark (almost black). Soon thereafter an intern examined her. She was not crying or "upset" but he noted a heart rate of 204 with shallow respirations (about 30 x/minute). His impression was "old blood vomited—Doubt G.I. Bleeding." One hour later the infant vomited again but this time fresh bright red blood mostly with bleeding from the nose and throat.

Respirations then became labored with retractions and the heart rate was recorded at 168 per minute. The intern called the pediatrician who saw the infant in 25-30 minutes (5:30 a.m.). He noted only shallow rapid respirations. (*No* number; heart rate was *not* recorded). The impression was "acute hemorrhage—?? Source." A chest X-ray (portable) showed "some haziness scattered over both lung fields with heart a little enlarged."

A CBC done at about 6 a.m. of 10/12/70 was reported back at 6:15 a.m. as Hgb=18.5 gm,

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Doctor Zavell is chairman, Neo-Natal and Hospital Care Committee, Michigan Chapter, AAP; and chairman, Perinatal Mortality Study Committee, Wayne County Medical Society.

Hct=61 Vol %, WBC=9000, PMN=12, Eos=02, Lymph=86 and 12 nuc Rbc's 100/WBC. Smear showed platelets decreased and moderate Macrocytosis and Polychromasia.

At 32 hours, 45 minutes of age (6:45 a.m.) the pediatrician re-examined the infant and noted slight abdominal distension. He noted that respirations were now irregular and the condition definitely had deteriorated. A flat plate done at 6:55 a.m. showed "a distended stomach but otherwise normal gas pattern." The infantly quickly deteriorated and expired at 7:45 a.m. (about 33½ hrs. of age). (At 1 hour of age the infant had been given 1.0 mgm of Aqua Mephyton IM).

An autopsy was done revealing acute bronchopneumonia (cultures not done but colonies of gram + cocci noted) and left hemithorax.

Perinatal Committee Comments

1. (a) Here is a case where communication between the obstetrician and the pediatrician was poor. If the pediatrician had known eight to 12 hours earlier about the illness of the mother, antibiotics may have been life-saving.

   (b) If it is necessary to treat a post-partum mother with antibiotics the Committee suggests:

      1. The nursery should be notified either by the obstetrician or by the OB nursing department.
      2. There is no substitute for *direct* communication between the obstetrician and the pediatrician when anything other than normal occurs in either the mother or the baby.

2. The usual WBC in a newborn ranges 12,000 to 25,000 or more. Infants react frequently to infection in the newborn period with *depression* of the WBC. The 9,000 here should have been a clue to look for possible infection.
3. Differential diagnosis here could have included at least the following: Ulcer of the Intestinal Tract, Hepatitis, and Coxachie Viral Myocarditis.

Management of spastic diplegia by the physiatrist

By Leonard F. Bender, MD
Ann Arbor
Nancy M. Bender, RPT
Detroit

Presented at the annual convention of the American Medical Association, July 15, 1969. New York City.

Frequently the physiatrist is the last physician to be consulted by the family of the patient with spastic diplegia—a type of cerebral palsy characterized by spasticity which is worse in the legs than in the arms. This is not an enviable position, although there is some advantage in the fact that previous examinations by other specialists have already elicited and graded the normal and abnormal reflexes present, gauged and documented the developmental level of the patient, and arrived at a diagnosis. By the time the physiatrist is consulted these children may be 6 to 12 months old and many have failed to pass normal developmental milestones such as sitting up, reaching out, and pulling up to standing.

Evaluation begins with the gestational history, particularly with respect to the patient's weight and degree of maturity at birth. Spastic diplegia is often associated with prematurity, but it is also seen in near-term babies who are underweight. Among diplegic infants with a history of premature birth but normal birthweight in relation to stage of development, girls outnumber boys two-to-one (Fuldner 1969). The "small-for-dates" baby, an infant whose birthweight was subnormal regardless of whether the birth was premature, is more likely to be subject to convulsions and will probably exhibit intellectual deficit (Fuldner 1969) and impaired somatic growth (Sinclair, et al. 1969). Thus from the physiatrist's standpoint the rehabilitation potential in any given case is partially related to birthweight and length of gestation.

Accurate assessment of the patient's muscle strength, tone, and control is often difficult, since the over-all muscle tone is altered by head position and increases when the child is under emotional stress, hungry or crying. It may be very difficult to grade strength of individual muscles by the manual muscle testing methods used in lower motorneuron weakness; however, one may grade the strength and ease of movements requiring groups of muscles; and the degree of cortical control may be graded. Since movement patterns are influenced by both spinal and supraspinal reflexes, a combination of these forms of muscle evaluation may be useful.

Joint range of motion, especially in the hips, knees, and ankles, must be measured and deformities of soft tissue and bone assessed. Common problems include shortening of the gastrocnemius-soleus mechanism and/or hamstring muscles, hip flexion contracture with femoral anteversion and increased lumbar lordosis, and occasionally a dislocated hip.

Accurate assessment of the child's mobility, whether in scooting, rolling, creeping, crawling, or walking, may not be possible on one or two brief examinations; it may best be judged by the physical therapist who has the opportunity to see and work with the child regularly. The occupational therapist can be of significant help in evaluating upper-extremity function. The speech therapist can provide suggestions to improve sucking, swallowing, and speech, as well as reduce drooling. Intellectual level should be ascertained by careful psychological evaluation repeated two or three times at 6- to 12-month intervals. The proper selection of psychological testing materials is as important as the examination procedure itself—the numerical intelligence quotient is very often given unjustifiable importance, with the result that the educational opportunities provided throughout the years of a child's development may be inappropriate and unproductive.

With this background information the physician is ready to set tentative goals for locomotion, self-care, and communication. The means of attaining these goals involve combinations of physical, occupational, and speech therapy, drugs, bracing, special education, social work, and parent counselling. The approach is holistic, including the parents and the community—a concept well described by Weiss and Betts (1967). The specifications for this manifold regimen and the coordination of the therapies involved are the responsibility of the physician. Only after becoming thoroughly famil-

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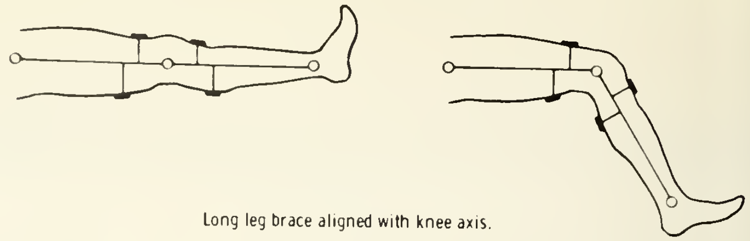
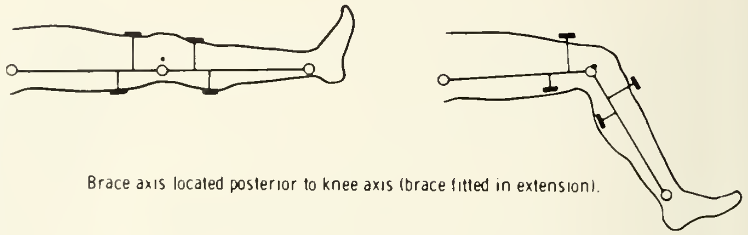
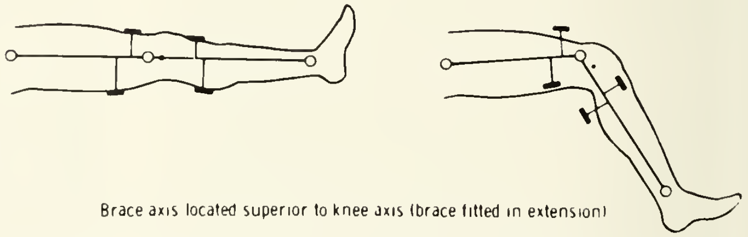
Doctor Bender is professor, Department of Physical Medicine and Rehabilitation, The University of Michigan, Ann Arbor while Nancy Bender is staff physical therapist, United Cerebral Palsy Association of Detroit, Inc.



Long leg brace aligned with knee axis.



Brace axis located posterior to knee axis (brace fitted in extension).



Brace axis located superior to knee axis (brace fitted in extension)

Fig. 1. Misalignment of the brace axis results in undesirable pressures when the knee is flexed. When the brace axis is located posterior to the knee axis in extension, flexion causes excessive pressure on the posterior thigh and calf. When the brace axis is misaligned superiorly, flexion causes excessive pressure on the posterior thigh and anterior shin.

Figure 1 is reproduced with permission from **Orthotics Etcetera**, ed 1, New Haven, Conn. Elizabeth Licht, Publisher, 1966, chap 2, pp. 44, 45.

iar with the principles and often the techniques of these therapies can he prescribe correctly.

Physical therapy must be properly prescribed. Too often a prescription is written for "physical therapy" and the decisions concerning goals and methods of treatment are left to the therapist. This is a responsibility no therapist should be asked to assume and which most therapists do not want to assume. The prescription should state what parts of the body are to be treated, how they are to be treated, and for how long. Some of the techniques used by the therapist can be taught to the parents and carried out by them at home. The therapist should report his patient's progress and his observations to the physician at a stated time, when a new prescription can be written.

Rehabilitation clinics in general use rather conventional programs of therapy involving: (1) stretching specific areas of soft-tissue tightness manually, by proper positioning, and with braces; (2) encouraging development of motor skills through repetition of movements and proper positioning for sitting, creeping, crawling, standing, and finally walking; (3) strengthening key muscles; (4) facilitation techniques to make use of reflex activity and encourage active voluntary function; and (5) inhibitory techniques to suppress unwanted reflex activity. Various techniques of neuromuscular facilitation have become popular at one time and then discredited at another time.

Reduction of activity in spastic muscles has been sought in a variety of ways including drugs, surgery, and most recently, injections of dilute solutions of phenol or alcohol into peripheral nerves or motor endplate areas of muscles. In carefully selected cases, we at The University of Michigan have been impressed with the effectiveness of phenol injections.

"Operant conditioning" is a technique which has been used to control animal behavior and may be applicable to human subjects. The "operant" is the existing movement, either voluntary or involuntary, that is to be brought under experimental control. Through a series of positive and negative reinforcements (rewards and punishments) the animal learns to perform a required maneuver. With human subjects, Hefferline (Foss 1966) has been able to control twitches of the masseter and thenar muscles so that EMG responses of a desired amplitude could be produced voluntarily. Brenner (Foss 1966) has shown that the heart rate can be controlled, without medication or voluntary changes in breathing rate, by giving negative reinforcement when the pulse rate fell within previously specified limits. The possibility that this technique might be used to control movements in the spastic child warrants investigation.

The management frequently includes assistive devices. The leg braces used in spastic diplegia either provide support, correct deformity, or assist function. They vary from night splints for prevention or correction of tight heelcords to long double uprights with a pelvic band, for standing and walking. In each instance the device applies forces which affect movement about skeletal joints.

Only recently have the forces at work in normal and abnormal musculoskeletal systems begun to be studied. The alignment of brace and skeletal joint axes is extremely important (**Figure 1**); sheer forces created by straps and cuffs (e.g., at the thigh, calf and knee) are another important consideration. Principles of alignment and placement of forces have been described by Smith and Juvinall in a chapter of the book *Orthotics Etcetera* (1966).

It behooves each of us involved in the use of braces to consider these points; otherwise, the forces created by malalignment may well prevent the action we are trying to assist or support. Brace fit, function, and alignment should be rechecked every 3 to 6 months; as the child grows the brace must be lengthened, the cuffs deepened, and the shoes changed. All leg braces for these children should be adjustable in height. We customarily have the cuffs covered with plastisol instead of leather (Harden, et al., 1967); other orthotists should explore the advantages of this nonabsorbent, resilient, easily applied material.

Shoes may be regular, orthopedic or surgical, low-quarter or high-quarter. The surgical shoe is particularly useful when the patient has poor control of the toes and has difficulty placing his foot correctly in the shoe.

In addition to prescribing the braces and shoes and checking their fit periodically, the physician should specify the length of time the brace is to be worn. If it is designed to correct tight heelcords and hamstrings, much benefit may be gained by wearing it all or part of the night—this too should be specified. When a detachable caliper has been used, a shoe with a vamp cut out may be used at night on the brace instead of the regular walking shoe. Frequently there is a lack of anticipated improvement because the parents or other attendants did not understand when, why and how long the braces should be worn.

Wheelchairs are used when walking is impossible or impractical with crutches and/or braces. The prescription for a wheelchair should be as specific as those for braces or medication, and again, the amount of time to be spent in it should be specified, as well as the time out of it—for exercise on mats or floor.

While the child is on an exercise mat, toys can help the therapist induce the desired positions and body movements. Large beach balls and cylindrical stuffed animals provide support in the prone position or can be used for gross arm coordination. Small blocks, nests of boxes, rings on a peg, and wheeled vehicles encourage bimanual coordination.

Perusal of current literature reveals great variation in management of spastic diplegia. The philosophy of treatment varies from treatment by a team of specialists including speech, physical, occupational and recreational therapists, and rehabilitation nurse, to treatment by one person who has been specially trained in the various therapies involved in cerebral palsy (Cotton 1965). Some clinics stress inhibition of patholgic reflexes, while others encourage and attempt to make positive use of such reflexes. Some centers use braces extensively while others shun them. One thing is clear—there is no one effective method of management of spastic diplegia.

Surgery should be considered whenever soft-tissue contractures are worsening in spite of adequate therapy, or when function can be improved by tendon transfer or arthrodesis. But bear in mind that postoperative disturbances lasting three to four months have been observed (Reynell 1965); these include diminished response to therapy, emotional disturbances, increased fatigue, and fearfulness. The patient should be psychologically prepared for surgery, not merely operated upon like a defective robot.

As the patient matures, aptitude and prevocational testing assumes greater importance than therapy. Vocational training under the auspices of special education programs may be indicated.

All the while the patient is being treated and evaluated, his parents will benefit from counselling. Through group sessions they learn that other parents have similar problems; they can share their grief as well as their solutions to common problems. Sometimes groups of parents form organizations for the common good; parents of cerebral palsied children in the United States form the backbone of United Cerebral Palsy. Together and with proper guidance they can approach the problems involved in planning for long-term care —problems of where to live, what to do during the day, how to provide protective supervision, and how to pay for care.

There is tremendous room for improvement in the vocational, avocational, and housing programs for cerebral palsy patients who are essentially wheelchair-bound. During the patient's growing years we may have been able to minimize deformity and optimize mobility, manipulative skill, and communication, only to come to the end of a blind alley vocationally. Much work remains to be done in this area of rehabilitation.

Summary

Proper management of spastic diplegia is based on an accurate evaluation of the abnormal physiologic states associated with brain damage. The role of pathologic reflexes and spasticity must be ascertained so that desirable effects can be counteracted by appropriate therapy while helpful effects are reinforced and utilized. Assessment of muscle strength and tone and joint range of motion helps the physician outline a program of exercise designed to minimize contractures, strengthen weak muscles, and increase functional capacity.

Attainable goals should be set for locomotion, self care, and communication. Where appropriate, vocational plans are made and avocational activities encouraged.

The means of attaining these goals entail combinations of physical, occupational, and speech therapy, drugs, bracing, social work, education, and parent counselling. The specifications for the manifold regimen and the appropriate interdigitation of the therapies involved are the responsibility of the physician.

Periodic reassessment of the patient is essential, to ensure that the goals and the program of management will be altered as necessary to maintain optimum progress.

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The effect of a nursing bottle on the teeth of a young child

By Harvey A. Beaver, DDS, MS
Harper Woods

One of the most extensive oral pathological disorders may be initially diagnosed in a physician's office when the child is between the ages of 30 months and 36 months. The unsuspecting parents of these children are unaware of the destruction slowly progressing on all surfaces of the developing teeth. Usually the pain is uncommunicative to the parents, therefore increasing the carious breakdown of the dentition. When the lesions can be readily seen, the disorder has spread to a most agonizing and rampant condition. The upper anterior teeth are either abscessed or totally destroyed, while the remaining teeth manifest some degree of carious involvement **(Fig. 1).**

This syndrome causing massive dental pathology in the maxillary anterior region has been noted for some time, but within the last ten years the causative agents have been thoroughly investigated. The condition has been termed as "nursing or baby bottle syndrome" and is easy to detect and diagnose but challenging to treat since we are dealing with uncooperative on non-communicative patients **(Fig. 2).**

The parents are quite shocked when presented with the problem and told the extent of the damage. Upon investigation the parents reveal a history of putting the child to sleep with a bottle containing milk formula, milk, juice, or sweetened water.

The child lies in bed with the nursing bottle in the mouth. The nipple rests against the palate while the tongue with the cheeks aid in the expulsion of the liquid from the bottle into the oral cavity. This process enables the tongue to contact the lips at the same time covering the mandibular anterior teeth. The sucking at first is rapid, but as the child falls off to sleep the rate of swallowing decreases along with salivary secretion and liquid ingestion. The liquid now present in the mouth emerses the oral cavity, thus permitting the carbohydrates to remain in contact with the teeth in the presence of microorganisms for a prolonged time period. The bottle remains in the mouth during most of the time the child is asleep with the liquid oozing into the oral cavity.

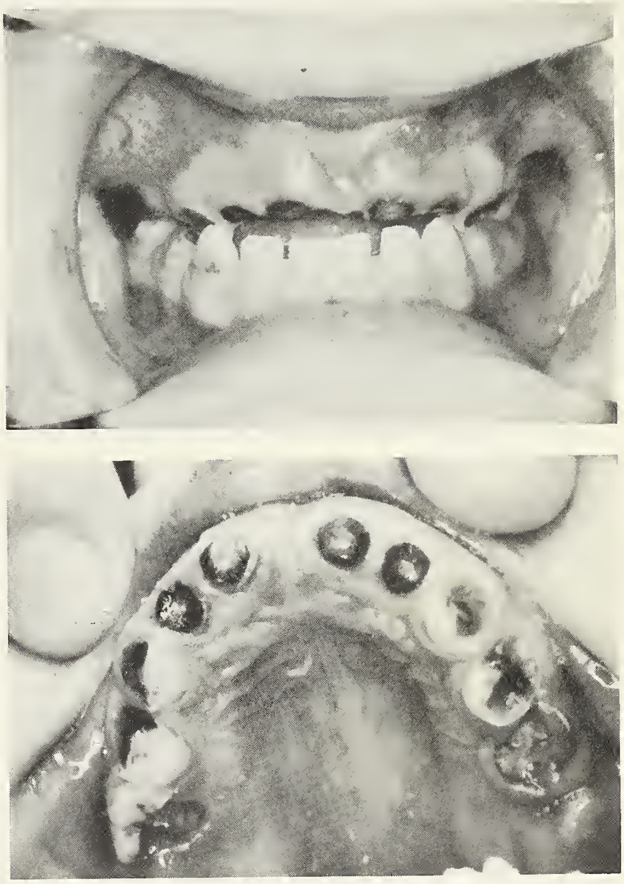

Fig. 1 A two year old who had been placed to bed each evening with a milk bottle. Note complete destruction of the upper anterior teeth.

The problems which may be associated with this malady are pain, infection, tongue thrusting and abnormal swallowing habits with concommittant speech difficulties.

Dental decay is a progressive destruction of the calcified tissues of the teeth initiated by bacterially produced acids on the tooth surface. It is an irreversible disease characterized by a demineralization of the inorganic portion and a destruction of the organic substance of the tooth.[1]

The exact etiology of dental disease is still unknown. What is known is that the carious process is dependent on many factors. These factors are, fermentable carbohydrates, oral microbial or-

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Doctor Beaver's article was provided to **Michigan Medicine** by the Michigan Dental Association which felt that pediatricians and family physicians especially would be interested. Its appearance coincides with Children's Dental Health Week Feb. 6-12, 1972.

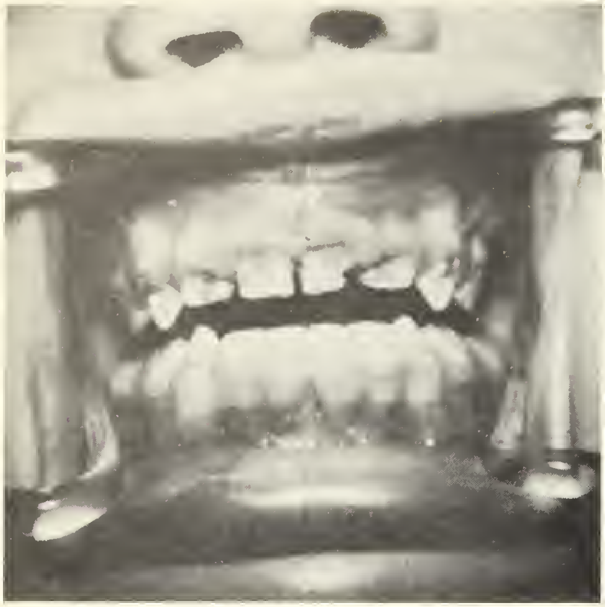

Fig. 2 A three year old who was given a bottle of juice during her afternoon nap time. The extent of the carious involvement is not as destructive as in Fig. 1.

ganisms, plaque material, tooth morphology and the oral clearance of carbohydrates.[4]

The acids involved in the caries process are derived from the carbohydrate substances which have been degraded by microbial enzymes. The enzymes are produced by the microorganisms in the plaque material, which is a thin gelatinous material adhering to the surface of the tooth. If the acid produced is maintained in contact with the tooth for a prolonged period of time the outer surface of the tooth will become decalcified thus initiating the carious process.[9]

One of the first pediatricians in this country, A. Jacobi in 1862,[6] suggested that milk may be a cariogenic agent. He observed a massive destruction of the primary teeth when an infant was given milk or water sweetened with sugar when going to sleep.

Weiss and Bibby[15] found that milk is a modifying element on enamel solubility. Their research concluded that regardless of whether is was raw, pasteurized, whole or skim milk, it reduced enamel solubility by 20 per cent.

In 1966, Jenkins and Ferguson[7] demonstrated from clinical data that milk has no local cariogenic effect and it is not an important factor in promoting caries. The laboratory experiments of this study suggested that milk possibly may have a local cariogenic effect on the teeth when associated with other foods. The authors suggested that the calcium and phosphate in milk are largely responsible for the reductions in the amount of enamel dissolved. Since the effect of milk was still detectable after it had been washed from the teeth, some substance must contribute to this effect. This substance has yet to be identified by these researchers. Weiss and Bibby[15] have speculated that this protective agent may be due to protein absorption on the tooth.

Sperling and associates[13] found that feeding milk and milk containing 10 per cent dissolved sucrose to rats during their entire life span did not produce dental caries. Those animals who had milk with free access to either a water solution of sucrose or dry sucrose developed very severe caries according to Sperling. It seems that milk consumed directly with sucrose in solution and in a limited proportion, seemed to protect the teeth.

Elliott and Pigman[2] found caries increased in hamsters on a typical infant's diet. Steinman and Haley[14] reported a study of the effect of; 20 per cent sucrose, 20 per cent lactose, and 20 per cent glucose and fructose on rats from birth until weaning at 21 days. Sucrose solutions caused the most carious lesions with the least being evident with lactose.

Vianna, in 1970,[17] tested four milk solutions during a six week period; bovine milk, human milk, bovine milk plus honey, and an infant formula. After six weeks, all milk solution groups showed signs of tooth decalcification. The milk and honey group had the highest decalcification rate while the least was plain bovine milk. The author suggests that time of contact and stagnation are important factors which determine the effect of decalcification on the tooth. Again it is stated that bovine milk is non-conductive to caries.

High milk consumption related to a high decay rate was observed in 864 children, age 10-16 years. An oral examination, along with a diet survey was conducted by Potgieber and associates.[11]

Pitts,[10] in a London Hospital study of 70 cases of extensive carious lesions in children three years or under, found that the upper incisors and the upper and lower molars, seldom the lower incisors, were the teeth most involved. The author after careful study observed that the incidence of caries did not appear to be affected by either breast or artificial feeding. Pitts noted that these children had been weaned on a dummy dipped in honey milk or sugar for an extensive period of time.

Robinson and Nylor[12] again indicated that milk bottle fluid heavily saturated with sugar is cariogenic if placed in the oral cavity of an infant during his sleep time. They also noted that decayed teeth could be associated with a slower gain in weight after the age of 2½ to 3 years.

Fass[3] investigated the prevalence of rampant caries in children under four years of age. He found that the common element among all these patients was that they were put to bed with a milk bottle from which they drank lying down. As the milk from the bottle continues to flow into the mouth while the child sleeps, all the factors necessary for the carious process to occur are present in the child's mouth which are the following:

1. Milk, sugar content of 3.8 per cent.
2. Oral microorganisms capable of producing acids.
3. Very slow clearance of the oral contents.
4. Decreased salivary secretion and decreased salivary flow.

Kroll and Stone[8] undertook a statistical analysis comparing the relationship between the occurrence of rampant dental caries and nocturnal nursing bottle feeding. The authors also analysed those patients with rampant caries to see if there might be a relationship between the pattern of decay and bottle feeding. From the analysis they found that nocturnal bottle feeding can contribute to rampant caries.

The prevalence of dental decay as related to a nursing bottle has been studied in England by Goose,[5] who found in a study of 309 children one to two years of age, 6.8 per cent showed the typical nursing bottle mouth.

Winter and associates[16] in a recent study in England of 602 children, ages 12-60 months, found 8 per cent with rampant caries. The etiological factors were the prolonged use of sweetened comforters and bottle feeding.

From the accumulated data and information it is evident that liquids enriched with carbohydrates that are consumed during the sleeping hours from a nursing bottle or other devices can produce extensive carious lesions in the infant.

It behooves the family physician and pediatrician to advise parents of the ill-effects of prolonged nocturnal bottle feeding. If for psychological reasons it is found necessary to use the nursing bottle, water should be recommended. In cases where there is a history of prolonged use of the night-time bottle the physician should advise the parents to seek dental treatment immediately.

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On the following pages is a chart on emergency treatment for the effects of commonly abused drugs. The chart is prepared by Edward J. Lynn, MD, assistant professor of psychology in the Michigan State University College of Human Medicine. It was produced for the Governor's Office of Drug Abuse, which also distributes guides to talking down a bad tripper, resource materials on drug abuse, a drug-abuse teaching kit and audio-video tapes. Doctor Lynn wishes to acknowledge Charles Maclean of the Governor's Office for his library research assistance.

Effects of Commonly Abused Drugs

Group	DRUG	HOW USED	USUAL EFFECTS SOUGHT	USUAL DURATION OF EFFECTS
Opiates	Heroin (Diacetylmorphine)	Sniffed or injected Dose varies	Euphoria, pain relief, prevention of withdrawal symptoms, etc.	4 - 6 hrs.
	Morphine (Morphine sulfate)	Swallowed or injected Dose varies		4 - 6 hrs.
	Methadone (Dolophine, Amidone)	Swallowed or injected Dose varies		4 - 6 hrs.
CNS Depressants	Barbiturates (Phenobarbital, Nembutal, Seconal, Amytal, etc.)	Swallowed or injected Dose varies	Euphoria, intoxication, anxiety reduction, and prevention of withdrawal symptoms	Depends on route and preparation
	Alcohol (Ethanol, Ethyl alcohol)	Swallowed Dose varies		
	Minor tranquilizers (Meprobamate, Librium, etc.)	Swallowed Dose varies		
Belladonna Alkaloids	Belladonna Scopolamine Hyoscyamine Stramonium Atropine Various over-the-counter sleep preparations	Swallowed or injected Dose varies	Euphoria, hallucinations	Varies
CNS Stimulants	Cocaine (Benzoylmethylecgonine)	Sniffed or injected Dose varies	Euphoria	Varies based on route and type of preparation (capsule, spansule, IV, etc.)
	Amphetamines (Benzedrine, Dexedrine, Dezoxin, Methamphetamine)	Swallowed or injected		
	Ritalin (Methylphenidate)	Swallowed or injected		
Hallucinogens	LSD (d-lysergic acid diethylemide)	Swallowed Dose varies	Euphoria, perceptual intensification, illusions and hallucinations	8 - 12 hrs.
	Mescaline (3, 4, 5—trimethoxy- phenethyl amine, or naturally from Peyote)	Swallowed Occasionally injected		8 - 12 hrs.
	DMT (Dimethyltriptamine)	Smoked or injected		1 - 3 hrs.
	"STP" (DOM, Dimethoxy-methylamphetamine)	Swallowed		Up to 2 - 4 days
	Psilocybin (3 [2-dimethyl amino] ethylindol—4 oldihydrogen phosphate), or naturally from mushrooms	Swallowed		5 - 8 hrs.
	PCP (Phencyclidene HCl, Sernylan)	Swallowed		Varies
Cannabinols	Marihuana (Cannabis sativa) Hashish (same as marihuana, has more Tetrahydrocannabinol)	Swallowed or smoked	Euphoria, perceptual intensification; illusions and hallucinations (in high doses)	Variable (2 - 4 hrs. if smoked, may last longer if swallowed)

Emergency Treatment of Their Effects

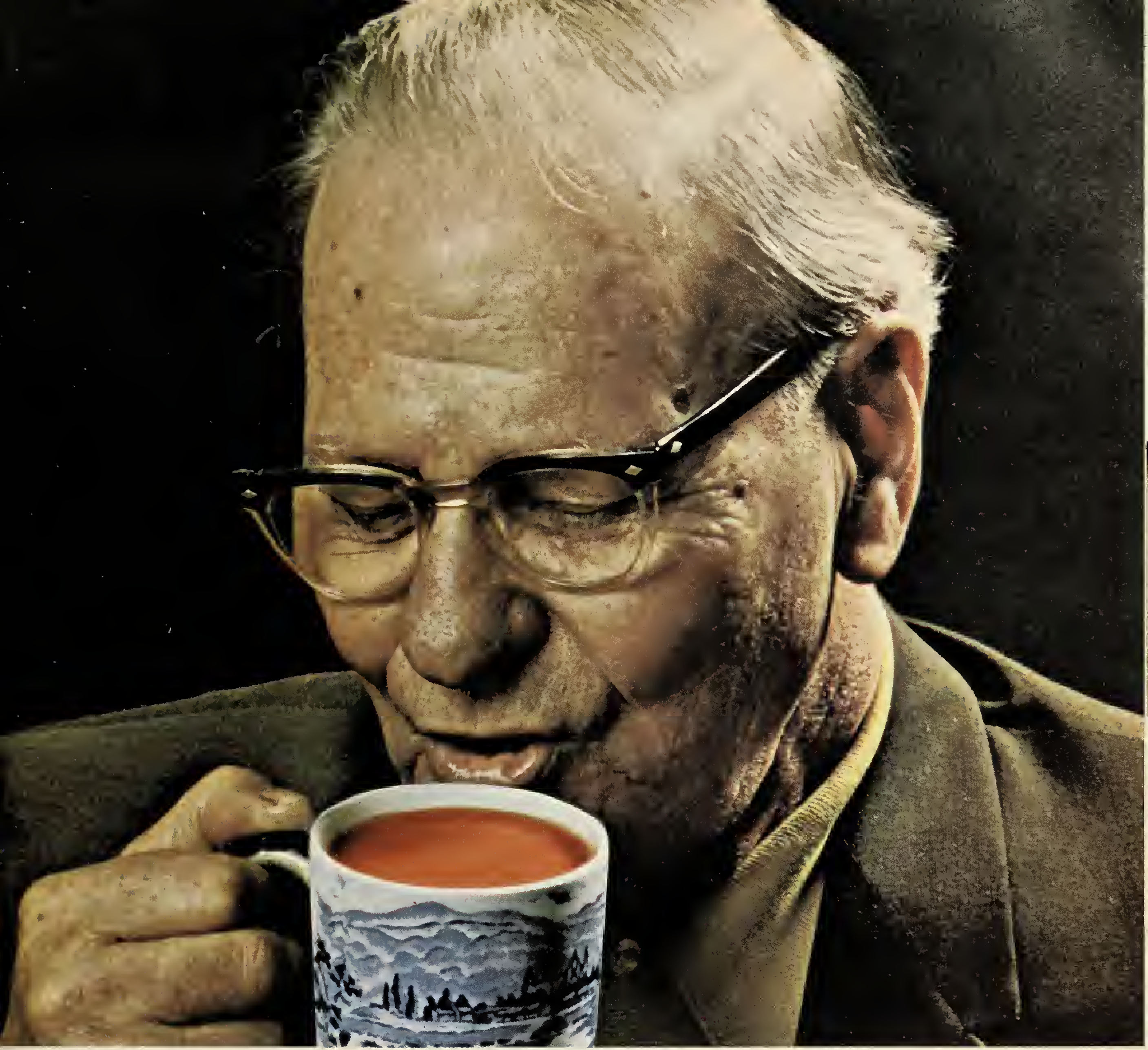
Prepared by Edward J. Lynn, M.D.

CITY A. INTOXICATION B. WITHDRAWAL	MANAGEMENT OF ACUTE TOXIC EFFECTS	MANAGEMENT OF WITHDRAWAL
int pupils (dilated with anoxia), atory depression, areflexia, coma, e 1 = anxiety, craving, yawning, ymation, rhinorrhea and restlessness e 2 = fixed dilated pupils, rection, cramps and muscle twitching e 3 = insomnia, elevated pulse, blood ure, temperature; nausea and vomiting	1. Establish airway, support respiration, cardiac massage for arrest, usual regimen for pulmonary edema if necessary, vasopressors as indicated 2. Levallorphan tartrate (Lorfan) 1 mg. or Nallorphine HCl (Nalline) 5 - 10 mg. IV, 1 - 3 times q 15 minutes as indicated (It is advisable not to exceed 40 mg. of Nalline.) DO NOT reduce vigilance after the patient becomes responsive.	Wait until stage 2 withdrawal and in the young, healthy patient give methadone 10 mg. p.o., t.i.d. and decrease dosage by 5 mg. daily for six days. In the elderly or debilitated give methadone until tolerance level is achieved, then withdraw slowly over 2 - 3 weeks. Another approach to managing the abstinence syndrome, especially if mild, involves symptomatic treatment with antiemetics (Compazine), analgesics (Darvon), and antihistamines (Benadryl) for sleep.
= fine lateral nystagmus, ssed reflexes mediate = ataxia, dysarthria = coarse nystagmus, Romberg sign, ataxia, somnolence e = CNS depression, mydriasis, , death ness, restlessness, tremulousness, nia, blepharoclonus, postural tension, anxiety, fever, delirium, ulsions, status epilepticus, psychosis visual hallucinations, and formication ulsions may occur 16 hrs. after abrupt lrawal and psychosis after 36 hrs.)	Induced vomiting or gastric lavage, keep moving and observation for mild cases More severely depressed patients may require mechanical assistance of respiration, IV fluids and electrolytes, and vasopressors. Some cases may require dialysis or exchange resins. In any case where the ingestion is possibly self destructive or suicidal, psychiatric evaluation should be obtained before the patient is discharged.	Determine tolerance level with a test dose of 200 mg. of pentobarbital and examine the patient in one hour. If no toxicity is seen, he will tolerate more than 800 mg. Estimate tolerance as follows: Nystagmus = 700 - 800 mg./day Mild Ataxia and Dysarthria = 500 - 600 mg./day Gross Ataxia = 400 mg. or less/day Give pentobarbital in divided doses and withdraw by 100 mg./day. There are many other reasonable regimens for treating D.T.—like withdrawal and may be found in most texts.
nouth and throat, dilated pupils, twitching, ulty swallowing, elevated temperature and pressure, slow pulse which may become and weak, respiratory depression, sis and urinary retention ness, giddiness, thirst, blurred vision, ement and confusion with hallucinations, um, stupor, coma	Supportive as indicated Phenothiazines are to be AVOIDED for they may cause cardiovascular collapse in combination with this group of drugs. Small doses of short acting barbiturates are indicated for the control of excitement.	
or, dry mouth, tachycardia and tension (may be absent in chronic use), ing, dilated pupils, hyperreflexia, palpi- s, convulsions, circulatory collapse may be extremely high and may lead ath. A panic reaction or a psychosis r to acute paranoid schizophreniza e seen.	Supportive Induced vomiting and gastric lavage if orally ingested. Sedation with short acting barbiturates or Valium (diazepam). Phenothiazines are useful in cases where psychosis needs to be managed—only if it is certain that no contaminants are involved. Hypothermia if indicated	Although these drugs are not technically physically addicting, depression and suicidal behavior have been observed in a number of amphetamine users who have stopped taking the drug (this may be a manifestation of underlying depression or a withdrawal phenomenon). Care must be exercised to evaluate these entities.
reactions (more from set and setting from drug), depersonalization, illusions, cinations (commonly visual) and delusions s may be dilated, incoordination, mild tion in pulse rate and blood pressure	Usually emotional support ("talking down") is sufficient. Thorazine and barbiturates are contraindicated unless LSD is certainly the only drug taken—fatalities may occur if the drug taken is STP or PCP or if contaminants such as strychnine or belladonna are involved. Valium (Diazepam) 20 - 50 mg. IM is thought by many to be the treatment of choice if sedation is necessary. It should be noted that a significant number of individuals who have psychotic episodes while under the influence of these drugs have been in emotional difficulties in the past. Follow-up evaluation is recommended. An acute episode while "tripping" may serve as case finding for some individuals.	
ientation, excitement; disturbances in h, proprioception and coordination; ased salivation drug may also exacerbate psychotic toms.	Supportive management—medically and psychologically, avoid drugs if possible in treatment	
tly elevated pulse, conjunctival tion, dried mucous membranes rse reactions are uncommon. 75 percent are panic ractions and ot pharmacologic. Of the remainder are depression (in the chronically essed—similar to "crying in your beer"). c psychosis (overdose) is uncommon and last 12 - 48 hrs. Occasionally a prolonged hotic episode may be seen in a borderline idual or someone who has been psychotic e past unrelated to drugs.	Supportive psychotherapy is usually sufficient for most cases of panic. Toxic psychosis may be treated with short acting barbiturates or Valium for sedation. The individual can generally sleep if off in a hospital setting. Chronic psychotic reactions are treated supportively on psychiatric units.	Produced for and distributed by Office of Drug Abuse State of Michigan 414 Hollister Bldg. Lansing, Mich. 48913 Tel. (157) 373-1728

Four television screens strategically located around the auditorium of E. W. Sparrow Hospital, Lansing, helped bring the message to mid-Michigan physicians attending a recent Gynecological-Surgical Clinic. Co-sponsors were the hospital, the Michigan Society of Obstetricians and Gynecologists and the Lansing Ob/Gyn Society.

Both clinic panels were chaired by Thomas Kirschbaum, MD, center, professor and chairman, Department of Ob/Gyn at MSU's College of Human Medicine. With him on one panel, from left, were Thomas DePuydt, College of Human Medicine senior; J. A. Caruso, MD, Lansing; Ray Hansen, College of Human Medicine senior, and W. E. Maldonado, MD, director of laboratories at Sparrow Hospital.

Key persons at the clinic, which presented live televised medical procedures and panel discussions, were, from left, E. B. Leverich, MD, panelist; F. W. Tamblyn, MD, clinic chairman, and Henry Malcolm, MD, panelist. All are members of the Lansing Ob/Gyn Society, and Doctor Tamblyn is president.



Campbell's Soups... wide variety...for limited appetites

Many people lose interest in food as they grow older. Some of them are fussy eaters—with only a few favorite foods. Others become indifferent to foods—because planning and preparing meals becomes a chore. Here Campbell's Soups can help—for these four very good reasons:

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Nourishment Campbell's Soups contain selected meats and sea foods, best garden vegetables—carefully processed to help retain their natural flavors and nutritive values.

Convenience Within 4 minutes a bowl of delicious soup is heated and ready to eat.

Economy Campbell's Soups are inexpensive—an important consideration to those whose budgets are limited.

Recommend Campbell's Soups . . . and, of course, enjoy them yourself. Remember, *there's a soup for almost every patient and diet . . . and for every meal.*

the 3 phases of Eve

All women are not equal in their endogenous hormonal output. And, while all oral contraceptives are fundamentally effective, they exhibit **differences n their activity levels and estrogen-progestogen ratios that affect different women differently**—in both short and long-term use. Some brands may be insufficient for the woman's needs or else may exceed them.

Searle offers a family of O.C. products that covers the range of women's needs to help you provide the right pill for the right woman at the right time.

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SEARLE

the Ovulen phase

Most women* with a **balanced hormone profile and normal menses** do best on a middle-of-the-road pill that is neither estrogen dominant nor strongly progestogen dominant.

(*Typical clues—normal body build and breasts, feminine appearance, healthy skin and hair. Vaginal cytology slide—balanced "pink and blue.")

Some women having problems on other O.C.s might do well on Ovulen.

Ovulen has a distinctive hormonal balance that combines moderate estrogenic activity with a slight progestogen dominance. It has an excellent record of patient acceptance.

Ovulen®

Each white tablet contains: ethynodiol diacetate 1 mg./mestranol 0.1 mg

For brief summary of prescribing informatic
see following page.

the Demulen phase

Many women* who secrete **more estrogen** than most do well on a pill with lower estrogen activity and an increased progestogen overbalance.

(*Typical clues—shorter, plumper, full-breasted, with glowing skin and no wrinkles. Vaginal cytology slide "pink.")

Some women with special conditions that may be aggravated by higher estrogen-activity products may do better on this ratio.

Demulen combines minimal estrogenic activity with a moderate ratio of progestogen overbalance. It is particularly well suited to the young when low-dose (activity) is preferred. Demulen offers little risk of the most potent progestogen side effects; early breakthrough bleeding is often transient.

Demulen®

Each white tablet contains: ethynodiol diacetate 1 mg./ethinyl estradiol 50 mcg

Each pink tablet in Ovulen-28® and Demulen®-28 is a placebo, containing no active ingredients.

Both Ovulen and Demulen are available in 21- and 28-pill schedules.

the Enovid-E phase

Some women* who secrete **less estrogen** than mc do best on a pill with a moderate estrogen overbalance.

(*Typical clues—oily complexion, acne, hirsutisr masculinity, flat chest. Vaginal cytology slide—"blue.")

Patients with estrogen deficiency may show:

premenopausal syndrome	intermittent depressi
early-cycle bleeding	increased appetite
scanty menses	steady weight gain

vaginal candidiasis

Enovid-E not only provides increased estrogeni activity with low progestogen activity, but also contains the only progestogen that is not antiestrogenic. Therefore it offers less risk of high dose progestogen side effects.

Enovid-E®

Each tablet contains: norethynodrel 2.5 mg./mestranol 0.1 mg.

Oral contraceptives are complex medications and, after reference to the prescribing information, should be prescribed with discriminating care.

for the 3 phases of Eve:

a family of O.C. products

Ovulen®

Each white tablet contains:
ethynodiol diacetate 1 mg./mestranol 0.1 mg.

Demulen®

Each white tablet contains:
ethynodiol diacetate 1 mg./ethinyl estradiol 50 mcg.

Each pink tablet in Ovulen-28® and Demulen®-28 is a placebo, containing no active ingredients.

Actions—Ovulen and Demulen act to prevent ovulation by inhibiting the output of gonadotropins from the pituitary gland. Ovulen and Demulen depress the output of both the follicle-stimulating hormone (FSH) and the luteinizing hormone (LH).

Special note—Oral contraceptives have been marketed in the United States since 1960. Reported pregnancy rates vary from product to product. The effectiveness of the sequential products appears to be somewhat lower than that of the combination products. Both types provide almost completely effective contraception.

An increased risk of thromboembolic disease associated with the use of hormonal contraceptives has now been shown in studies conducted in both Great Britain and the United States. Other risks, such as those of elevated blood pressure, liver disease and reduced tolerance to carbohydrates, have not been quantitated with precision.

Long-term administration of both natural and synthetic estrogens in subprimate animal species in multiples of the human dose increases the frequency of some animal carcinomas. These data cannot be transposed directly to man. The possible carcinogenicity due to the estrogens can be neither affirmed nor refuted at this time. Close clinical surveillance of all women taking oral contraceptives must be continued.

Indication—Ovulen and Demulen are indicated for oral contraception.

Contraindications—Patients with thrombophlebitis, thromboembolic disorders, cerebral apoplexy or a past history of these conditions, markedly impaired liver function, known or suspected carcinoma of the breast, known or suspected estrogen-dependent neoplasia and undiagnosed abnormal genital bleeding.

Warnings—The physician should be alert to the earliest manifestations of thrombotic disorders (thrombophlebitis, cerebrovascular disorders, pulmonary embolism and retinal thrombosis). Should any of these occur or be suspected the drug should be discontinued immediately.

Retrospective studies of morbidity and mortality conducted in Great Britain and studies of morbidity in the United States have shown a statistically significant association between thrombophlebitis, pulmonary embolism, and cerebral thrombosis and embolism and the use of oral contraceptives. There have been three principal studies in Britain[1-3] leading to this conclusion, and one[4] in this country. The estimate of the relative risk of thromboembolism in the study by Vessey and Doll[3] was about sevenfold; while Sartwell and associates[4] in the United States found a relative risk of 4.4, meaning that the users are several times as likely to undergo thromboembolic disease without evident cause as nonusers. The American study also indicated that the risk did not persist after discontinuation of administration and that it was not enhanced by long-continued administration. The American study was not designed to evaluate a difference between products. However, the study suggested that there might be an increased risk of thromboembolic disease in users of sequential products. This risk cannot be quantitated, and further studies to confirm this finding are desirable.

Discontinue medication pending examination if there is sudden partial or complete loss of vision, or if there is a sudden onset of proptosis, diplopia or migraine. If examination reveals papilledema or retinal vascular lesions medication should be withdrawn.

Since the safety of Ovulen and Demulen in pregnancy has not been demonstrated, it is recommended that for any patient who has missed two consecutive periods pregnancy should be ruled out before continuing the contraceptive regimen. If the patient has not adhered to the prescribed schedule the possibility of pregnancy should be considered at the time of the first missed period.

A small fraction of the hormonal agents in oral contraceptives has been identified in the milk of mothers receiving these drugs. The long-range effect to the nursing infant cannot be determined at this time.

Precautions—The pretreatment and periodic physical examinations should include special reference to the breasts and pelvic organs, including a Papanicolaou smear since estrogens have been known to produce tumors, some of them malignant, in five species of subprimate animals. Endocrine and possibly liver function tests may be affected by treatment with Ovulen or Demulen. Therefore, if such tests are abnormal in a patient taking Ovulen or Demulen, it is recommended that they be repeated after the drug has been withdrawn for two months. Under the influence of progestogen-estrogen preparations preexisting uterine fibromyomas may increase in size. Because these agents may cause some degree of fluid retention, conditions which might be influenced by this factor, such as epilepsy, migraine asthma, cardiac or renal dysfunction, require careful observation. In breakthrough bleeding, and in all cases of irregular bleeding per vaginam, nonfunctional causes should be borne in mind. In undiagnosed bleeding per vaginam adequate diagnostic measures are indicated. Patients with a history of psychic depression should be carefully observed and the drug discontinued if the depression recurs to a serious degree. Any possible influence of prolonged Ovulen or Demulen therapy on pituitary, ovarian, adrenal, hepatic or uterine function awaits further study. A decrease in glucose tolerance has been observed in a significant percentage of patients on oral contraceptives. The mechanism of this decrease is obscure. For this reason, diabetic patients should be carefully observed while receiving Ovulen or Demulen therapy. The age of the patient constitutes no absolute limiting factor, although treatment with Ovulen or Demulen may mask the onset of the climacteric. The pathologist should be advised of Ovulen or Demulen therapy when relevant specimens are submitted. Susceptible women may experience an increase in blood pressure following administration of contraceptive steroids.

Adverse reactions observed in patients receiving oral contraceptives—A statistically significant association has been demonstrated between use of oral contraceptives and the following serious adverse reactions: thrombophlebitis, pulmonary embolism and cerebral thrombosis.

Although available evidence is suggestive of an association, such a relationship has been neither confirmed nor refuted for the following serious adverse reactions: neuro-ocular lesions, e.g., retinal thrombosis and optic neuritis.

The following adverse reactions are known to occur in patients receiving oral contraceptives: nausea, vomiting, gastrointestinal symptoms (such as abdominal cramps and bloating), breakthrough bleeding, spotting, change in menstrual flow, amenorrhea during and after treatment, edema, chloasma or melasma, breast changes (tenderness, enlargement and secretion), change in weight (increase or decrease), changes in cervical erosion and cervical secretions, suppression of lactation when given immediately post partum, cholestatic jaundice, migraine, rash (allergic), rise in blood pressure in susceptible individuals and mental depression.

Although the following adverse reactions have been reported in users of oral contraceptives, an association has been neither confirmed nor refuted: anovulation post treatment, premenstrual-like syndrome, changes in libido, changes in appetite, cystitis-like syndrome, headache, nervousness, dizziness, fatigue, backache, hirsutism, loss of scalp hair, erythema multiforme, erythema nodosum, hemorrhagic eruption and itching.

The following laboratory results may be altered by the use of oral contraceptives: hepatic function: increased sulfobromophthalein retention and other tests; coagulation tests: increase in prothrombin, Factors VII, VIII, IX and X; thyroid function: increase in PBI and butanol extractable protein bound iodine, and decrease in T^3 uptake values; metyrapone test and pregnanediol determination.

References: 1. Royal College of General Practitioners: Oral Contraception and Thrombo-Embolic Disease, J. Coll. Gen. Pract. *13*:267-279 (May) 1967. **2.** Inman, W. H. W., and Vessey, M. P.: Investigation of Deaths from Pulmonary, Coronary, and Cerebral Thrombosis and Embolism in Women of Child-Bearing Age, Brit. Med. J. *2*:193-199 (April 27) 1968. **3.** Vessey, M. P., and Doll, R.: Investigation of Relation Between Use of Oral Contraceptives and Thromboembolic Disease. A Further Report, Brit. Med. J. *2*:651-657 (June 14) 1969. **4.** Sartwell, P. E.; Masi, A. T.; Arthes, F. G.; Greene, G. R., and Smith, H. E.: Thromboembolism and Oral Contraceptives: An Epidemiologic Case-Control Study, Amer. J. Epidem. *90*:365-380 (Nov.) 1969.

SEARLE
Products of SEARLE & CO.
San Juan, Puerto Rico 00936

Enovid-E®

norethynodrel 2.5 mg./mestranol 0.1 mg.

Actions—Enovid-E acts to prevent ovulation by inhibiting the output of gonadotropins from the pituitary gland. Enovid-E depresses the output of both the follicle-stimulating hormone (FSH) and the luteinizing hormone (LH).

Indication—Enovid-E is indicated for oral contraception.

The *Special Note, Contraindications, Warnings, Precautions* and *Adverse Reactions* listed above for Ovulen and Demulen are applicable to Enovid-E and should be observed when prescribing Enovid-E.

SEARLE **Enovid-E**®
brand of norethynodrel with mestranol

Product of G. D. Searle & Co.
P.O. Box 5110, Chicago, Illinois 60680
Where "The Pill" Began

Try Eutron™ on a stubborn diastolic

pargyline hydrochloride 25 mg. and methyclothiazide 5 mg.

100 (Grooved) Filmtab®
No. 7240
EUTRON
Pargyline Hydrochloride Methyclothiazide
Caution Federal (U
law prohibits dispensing without prescription.
ABBOTT
16
113

When you're not satisfied with your patient's diastolic "end point" under present treatment, consider a trial of Eutron. It will often bring further reduction of blood pressure, even in severe diastolic hypertension.

Special Characteristics of Eutron:

Course of therapy usually is smooth, with blood pressure reducing gradually over one to three weeks.

Around-the-clock effect from a single daily dose.

Provides diuresis when edema accompanies hypertension.

Free of central depressant action.

Lower doses of pargyline hydrochloride are made possible because of the methyclothiazide component.

TM—Trademark

Special Restrictions (see back of page):

Tyramine-containing foods (e.g. aged cheese) should be avoided. (For further listing of foods, see back of page.)

If alcohol is used, it should be used cautiously and in reduced amounts.

Patients should be warned against the concurrent use of non-prescription medications (particularly cold preparations and antihistamines), or prescription drugs without physician's consent.

Discontinue Eutron at least two weeks prior to elective surgery.

Before prescribing Eutron, see prescribing information in package insert. A brief summary appears on next page.

201363

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Brief Summary
EUTRON™
pargyline hydrochloride and methyclothiazide
Filmtab®

INDICATIONS. EUTRON (pargyline hydrochloride and methyclothiazide) is indicated in the treatment of patients with moderate to severe hypertension, especially those with severe diastolic hypertension. *It is not recommended for use in patients with mild or labile hypertension amenable to therapy with sedatives and/or thiazide diuretics alone.*

Because of the potent diuretic properties of methyclothiazide, the combination is particularly suited for use when congestive heart failure or other conditions requiring diuretic therapy coexist with hypertension, or when edema attributable to antihypertensive therapy develops.

As discussed in regard to dosage and administration, it is desirable to establish the dosage requirements for EUTRON by the administration of Eutonyl and Enduron separately.

CONTRAINDICATIONS. 1. Pargyline therapy is contraindicated in patients with pheochromocytoma, paranoid schizophrenia, hyperthyroidism and advanced renal failure.

2. Pargyline should not be administered to those with malignant hypertension, or to children under twelve years of age because significant clinical information concerning the use of the drug in these conditions is not available.

3. In general, the following drugs or agents are contraindicated in patients receiving pargyline hydrochloride:

a. Centrally acting sympathomimetic amines such as amphetamine and its derivatives (also found in anorectic preparations)

Peripherally acting sympathomimetic drugs such as ephedrine and its derivatives (also found in nasal decongestants, hay fever preparations and cold remedies).

b. Aged and natural cheese (e.g., Cheddar, Camembert, and Stilton), and other foods (e.g., pickled herring, Chianti wine, pods of broad beans, chicken livers, chocolate and yeast products), which require the action of bacteria or molds for their preparation or preservation, because of the presence of pressor substances such as tyramine. Banana peels are also contraindicated. Cream cheese, processed cheese, and cottage cheese can be allowed in the diet during EUTRON therapy, since their tyramine content is inconsequential.

In some patients receiving EUTRON, tyramine may precipitate an abrupt rise in blood pressure accompanied by some or all of the following: severe headache, chest pain, profuse sweating, palpitation, tachycardia or bradycardia, visual disturbances, stertorous breathing, coma, and intracranial bleeding (which could be fatal). A phenothiazine derivative or phentolamine may be administered parenterally for treatment of such an acute hypertensive reaction

c. Parenteral administration of reserpine or guanethidine may cause hypertensive reactions from sudden release of catecholamines. Parenteral use of these drugs is contraindicated during, and for at least one week following, treatment with EUTRON

d. Imipramine, amitriptyline, desipramine, nortriptyline, or their analogues should not be used with pargyline. The use of these drugs with monoamine oxidase inhibitors has been reported to cause vascular collapse and hyperthermia which may be fatal. A drug-free interval (about two weeks) should separate therapy with EUTRON and use of these agents.

e. Methyldopa or dopamine, which may cause hyperexcitability in patients receiving pargyline, should not be given.

f. Other monoamine oxidase inhibitors should not be added to a EUTRON regimen since they may augment the effects of pargyline.

4. Methyclothiazide is contraindicated in patients with a known sensitivity to methyclothiazide and/or other thiazide diuretics. It should not be used in patients with severe renal disease (except nephrosis) or complete renal shutdown. Thiazide diuretics should not be used in the presence of severe liver disease and/or impending hepatic coma. Hepatic coma has been reported as a consequence of hypokalemia in patients receiving thiazide diuretics.

WARNINGS

A. PATIENTS

1. PATIENTS SHOULD BE WARNED AGAINST THE USE OF ANY OVER-THE-COUNTER PREPARATIONS, PARTICULARLY "COLD PREPARATIONS" AND ANTIHISTAMINES OR PRESCRIPTION DRUGS WITHOUT THE KNOWLEDGE AND CONSENT OF THE PHYSICIAN
2. PATIENTS SHOULD BE CAUTIONED ON THE USE OF CHEESE (SEE CONTRAINDICATIONS) AND ALCOHOLIC BEVERAGES IN ANY FORM.
3. PATIENTS SHOULD BE WARNED ABOUT THE LIKELIHOOD OF THE OCCURRENCE OF ORTHOSTATIC HYPOTENSION.
4. PATIENTS SHOULD BE INSTRUCTED TO REPORT PROMPTLY THE OCCURRENCE OF SEVERE HEADACHE OR OTHER UNUSUAL SYMPTOMS.
5. PATIENTS WITH ANGINA PECTORIS OR CORONARY ARTERY DISEASE SHOULD BE ESPECIALLY WARNED NOT TO INCREASE THEIR PHYSICAL ACTIVITIES IN RESPONSE TO A DIMINUTION IN ANGINAL SYMPTOMS OR AN INCREASE IN WELL-BEING OCCURRING DURING TREATMENT WITH EUTRON.

B. PHYSICIANS

1. WHEN INDICATED THE FOLLOWING SHOULD BE CAUTIOUSLY PRESCRIBED IN REDUCED DOSAGES:
   a. ANTIHISTAMINES
   b. HYPNOTICS, SEDATIVES OR TRANQUILIZERS
   c. NARCOTICS (MEPERIDINE SHOULD NOT BE USED)
2. DISCONTINUE EUTRON AT LEAST TWO WEEKS PRIOR TO ELECTIVE SURGERY.
3. IN EMERGENCY SURGERY THE DOSE OF NARCOTICS OR OTHER PREMEDICATIONS SHOULD BE REDUCED TO 1/4 TO 1/5 THE USUAL AMOUNT. CLINICAL EXPERIENCE HAS SHOWN THAT RESPONSE TO ALL ANESTHETIC AGENTS CAN BE EXAGGERATED IN PATIENTS RECEIVING EUTRON. THEREFORE THE DOSE OF THE ANESTHETIC SHOULD BE CAREFULLY ADJUSTED.
4. PARGYLINE HYDROCHLORIDE MAY INDUCE HYPOGLYCEMIA.
5. CARE SHDULD BE EXERCISED IN USING EUTRON IN PATIENTS WITH ADVANCED RENAL FAILURE

The possibility of sensitivity reactions to methyclothiazide or pargyline should be considered in patients with a history of allergy or bronchial asthma.

There have been several reports published and unpublished, concerning nonspecific small bowel lesions consisting of stenosis with or without ulceration, associated with the administration of enteric-coated thiazides with potassium salts These lesions may occur with enteric-coated potassium tablets alone or when they are used with nonenteric-coated thiazides, or certain other oral diuretics

These small bowel lesions have caused obstruction, hemorrhage and perforation. Surgery was frequently required and deaths have occurred

Available information tends to implicate enteric-coated potassium salts although lesions of this type also occur spontaneously. Therefore, coated potassium-containing formulations should be administered only when adequate dietary supplementation is not practical, and should be discontinued immediately if abdominal pain, distention, nausea, vomiting or gastrointestinal bleeding occurs.

The possibility of exacerbation or activation of systemic lupus erythematosus has been reported for sulfonamide derivatives, including thiazides

EUTRON does not contain added potassium

USE IN PREGNANCY

Pargyline Hydrochloride. Safe use of pargyline during pregnancy or lactation has not yet been established. Before prescribing pargyline in pregnancy, in lactation, or in women of childbearing age, the potential benefits of the drug should be weighed against its possible hazard to mother and child.

Methyclothiazide. Thiazides should be used with caution in pregnant women and nursing mothers since they cross the placental barrier and appear in cord blood and in breast milk. The use of thiazides may result in fetal or neonatal jaundice, bone marrow depression and thrombocytopenia, altered carbohydrate metabolism in newborn infants of mothers showing decreased glucose tolerance, and possible other adverse reactions which have occurred in the adult. When the drug is used in women of childbearing age, the potential benefits of the drug should be weighed against the possible hazards to the fetus.

PRECAUTIONS

Pargyline Hydrochloride. The therapeutic response to a variety of drugs may be changed, or exaggerated, in patients receiving a monoamine oxidase inhibitor such as pargyline hydrochloride. Caffeine, alcohol, antihistamines, barbiturates, chloral hydrate, and other hypnotics, sedatives, tranquilizers and narcotics (meperidine should not be used), should be used cautiously and at reduced dosage in patients who are taking pargyline.

Pargyline has not been shown to damage the kidney or liver. However, laboratory studies including complete blood counts, urinalyses, and liver function tests should be performed periodically. The drug should be used with caution in the presence of liver disease. All patients with impaired circulation to vital organs from any cause including those with angina pectoris, coronary artery disease, and cerebral arteriosclerosis should be closely observed for symptoms of orthostatic hypotension. If hypotension develops in these patients, EUTRON dosage should be reduced or therapy discontinued since severe and/or prolonged hypotension may precipitate cerebral or coronary vessel thromboses.

The hypotensive effect of pargyline may be augmented by febrile illnesses. It may be advisable to withdraw the drug during such diseases.

Since pargyline is excreted primarily in the urine, patients with impaired renal function may experience cumulative drug effects. Such patients should also be watched for elevations of blood urea nitrogen and other evidence of progressive renal failure. If such alterations should persist and progress, the drug should be discontinued.

An increased response to central depressants may be manifested by acute hypotension and increased sedative effect. Pargyline also may augment the hypotensive effects of anesthetic agents and surgery. For this reason, the drug should be discontinued from at least two weeks prior to surgery.

In the event of emergency surgery smaller than usual doses (1/4 to 1/5) of narcotics, analgesics, sedatives, and other premedications should be used. If severe hypotension should occur, this can be controlled by small doses of a vasopressor agent such as levarterenol.

Pargyline therapy should not be used in individuals with hyperactive or hyperexcitable personalities, as some of these patients show an undesirable increase in motor activity with restlessness, confusion, agitation and disorientation. Clinical studies have shown that pargyline may unmask severe psychotic symptoms such as hallucinations or paranoid delusions in some patients with pre-existing serious emotional problems. This can usually be controlled by judicious administration of chlorpromazine intramuscularly, or other phenothiazines, the patient remaining supine for one hour after administration.

Pargyline should be used with caution in patients with Parkinsonism, as it may increase symptoms. In addition, great care is required if pargyline is administered in conjunction with anti-parkinsonian agents.

In experience to date, pargyline has not been associated with eye changes or optic atrophy as reported with the use of some hydrazine monoamine oxidase inhibitors. However, patients receiving this drug for prolonged periods should be examined for any changes in color perception, visual fields, fundi, and visual acuity.

Clinical reports state that certain individuals receiving pargyline for a prolonged period of time are refractory to the nerve-blocking effects of local anesthetics, e.g., lidocaine.

Methyclothiazide. Thiazide therapy should be used with caution in patients with severely impaired renal function because of the possibility of cumulative effects. Caution is also necessary in patients with severely impaired hepatic function or progressive liver disease.

Thiazide drugs may reduce response to levarterenol. Accordingly, the dosage of vasopressor agents may need to be modified in surgical patients who have been receiving thiazide therapy.

Thiazide drugs may increase the responsiveness to tubocurarine.

The antihypertensive effect of the drug may be enhanced in the sympathectomized patient.

All patients should be observed for clinical signs of fluid or electrolyte imbalance, including hyponatremia ("low-salt" syndrome). These include thirst, dryness of the mouth, lethargy and drowsiness.

Hypokalemia may occur during therapy with methyclothiazide. In such cases supplemental potassium may be indicated. Potassium depletion can be hazardous in patients taking digitalis. Myocardial sensitivity to digitalis is increased in the presence of reduced serum potassium and signs of digitalis intoxication may be produced by formerly tolerated doses of digitalis. Hypochloremic alkalosis may occur following intensive or prolonged thiazide therapy. Replacement of chloride may be indicated in such cases.

Thiazides may decrease serum P.B.I. levels without signs of thyroid disturbance.

ADVERSE REACTIONS. Generally side effects should not be severe or serious when the recommended dosages are used, and necessary precautions are observed. If side effects are severe or persist in spite of symptomatic treatment, the dosage should be reduced or the drug withdrawn. See also Warnings and Precautions.

Pargyline Hydrochloride. The most frequently occurring side effects are those associated with orthostatic hypotension (dizziness, weakness, palpitation, or fainting). These usually respond to a reduction of dosage. Patients should be warned against rising to a standing position too quickly, especially when getting out of bed. Severe and persistent orthostatic hypotension should be avoided by reduction in dosage and/or discontinuation of therapy.

Mild constipation, fluid retention with or without edema, dry mouth, sweating, increased appetite, arthralgia, nausea and vomiting, headache, insomnia, difficulty in micturition nightmares, impotence and delayed ejaculation, rash and purpura, have also been encountered. Hyperexcitability, increased neuromuscular activity (muscle twitching) and other extra-pyramidal symptoms have been reported. Gain in weight may be due either to edema or increased appetite. Drug fever is extremely rare. In some patients reduction of blood sugar has been noted. Although the significance of this has not been elucidated, the possibility of hypoglycemic effects should be borne in mind. Congestive heart failure has been reported in patients with reduced cardiac reserve.

Methyclothiazide. Side effects that may accompany thiazide therapy include anorexia, nausea, vomiting, diarrhea, headache, dizziness, paresthesias, weakness, skin rash, photosensitivity. Jaundice and pancreatitis also have been reported.

Blood dyscrasias, including thrombocytopenia with purpura, agranulocytosis and aplastic anemia, have been reported with thiazide drugs.

Thiazides have been reported, on rare occasions, to have elevated serum calcium to hypercalcemic levels. The serum calcium levels have returned to normal when the medication has been stopped. This phenomenon may be related to the ability of the thiazide diuretics to lower the amount of calcium excreted in the urine.

Elevations of blood urea nitrogen, serum uric acid, and blood sugar have occurred with the use of thiazide drugs. Symptomatic gout may be induced.

Although not established as an adverse effect of methyclothiazide, it has been reported that thiazide diuretics may produce a cutaneous vasculitis in elderly patients.

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204364

New MSMS committee structure works this way:

After more than a year of study, the MSMS committee structure and reporting system was revamped by the Planning and Priorities Committee and adopted by The Council.

Brooker L. Masters, MD, chairman, announced the new procedure in October, noting that all the innovations would be meshed into the system by mid-1972.

Doctor Masters praised the staff which had labored over committee revisions for many months in consultation with the Planning and Priorities Committee.

Following is the final amended report as recommended by the Planning and Priorities Committee and adopted by The Council:

Up-Dating of Committees

The majority of the committees of the Michigan State Medical Society were established many, many years ago—when the concerns were much different than today.

To bring the committee structure in line with present-day goals and objectives, all the committees should be studied to determine if some of them can be dropped or combined, etc. The purposes must be reviewed and redefined.

Committee System

1. Terms

Under the present system, the committees begin their year after the Annual Session and end it in the spring, when they are asked to submit their summaries of activities. Then they are re-appointed for the following year.

This procedure limits the actual working time of the committees to about six months.

So the committees can function on a year-round basis, the chairmen and members could be appointed to serve two-year terms, with the expiration dates staggered. No member could serve for more than three terms—thus assuring that the committees would periodically have new people added.

2. Appointment of Committees

Since appointments would be made for two-year terms, it is recommended that the officers who will be serving during that period should jointly select, with the consent of The Council, the doctors who are to be invited to serve on the committees—namely, the President, the President-Elect, the Chairman of The Council, and the Vice Chairman of The Council.

Recommendations for appointments would come from the committees, MSMS officers and councilors, the county societies, etc.

Appointments would be made in June or July for the ensuing MSMS fiscal year.

In addition, each year the Society would send out a questionnaire to the entire membership of MSMS (this could be a tear-out in *Michigan Medicine)* giving them an opportunity to let the Society know they would be interested in serving on a committee.

When making their appointments, the appointing officers should give consideration to appointing one or two delegates to each committee. This would involve our delegates in more committee activities. Few now serve. The appointment of councilors and officers to selected committees also should be considered.

As a guideline, the committees should be composed of not less than eleven or not more than twenty-one members. This size is for optimum effectiveness. Exceptions would be made in the case of committees with unique functions.

In general, it is recommended that no vice-chairmen be appointed.

Operation of the Committees

Annually, the committees shall develop objectives for the coming year, based on (1) referrals from The Council, (2) assignments from the Planning and Priorities Committee, (3) ideas from the members of the committee, and (4) charges from the House of Delegates.

This plan of activities would be presented to The Council for its information and review and subsequently, along with a proposed budget, submitted to the Finance Committee of The Council so that appropriate funds can be allocated for the implementation of the committee's program and projects.

To carry out these projects, the committees will have the privilege of appointing study groups to work on an informal basis and report back to the main committee.

(Continued on Page 128)

SYNTHROID
T4

T_4 IS THE PREDICTABLE HORMONE BECAUSE IT LOVES PROTEIN.

SYNTHROID® (sodium levothyroxine) is pure synthetic T_4, the major circulating thyroid hormone. It is reliable to use because of its affinity for protein-binding sites in the blood. T_3 is more fickle. Sometimes it binds. Sometimes it doesn't. T_4 more *predictably* binds to protein.

RADAR AHEAD

ALL THYROID-FUNCTION TESTS ARE USEFUL IN MONITORING SYNTHROID THERAPY

No calculations are needed, test interpretation is simple.

Any of the commonly used T_4 thyroid function tests (P.B.I., T_4 By Column, Murphy-Pattee, Free Thyroxine) are useful in monitoring patients on T_4 because they *all* measure T_4. Patients on SYNTHROID are thereby easy to monitor because their results will fall within predictable, elevated test ranges. Of course, clinical assessment is the best criterion of the thyroid status of the drug-treated patient.

TEST	HYPOTHYROID	SYNTHROID THERAPEUTIC NORMAL
P.B.I.	Less than 4 mcg %	6-10 mcg %
T_4 By Column	Less than 3 mcg %	7-9 mcg %
T_3 (Resin)	Less than 25%	27-35%
T_3 (Red Cell)	Less than 11%	11.5-18%
Free Thyroxine	Less than 0.7 nanograms %	0.7-2.5 nanograms %
Murphy-Pattee	Less than 2.9 mcg %	4-11 mcg %

HISTORICAL MARKER

TWO GOOD REASONS WHY THE ROAD TO NORMALIZED THYROID STATUS IS SO SMOOTH FOR THE SYNTHROID PATIENT.

(1) The onset of action of T_4 is gradual. It has a long in vivo "half-life" of over six days. (Occasional missed doses or accidental double-doses are of less concern because of this factor)[1]; (2) since SYNTHROID contains only T_4, the potential for metabolic surges traceable to more potent iodides (T_3) is eliminated.

AS WITH ANY THYROID PREPARATION, CAUTIOUS OBSERVATION OF THE PATIENT DURING THE BEGINNING OF THERAPY WILL ALERT THE PHYSICIAN TO ANY UNTOWARD EFFECTS.

Side effects, when they do occur, are related to excessive dosage. Caution should be exercised in administering the drug to patients with cardiovascular disease. Read the accompanying prescribing information for additional data or write Flint Laboratories.

Choose the Smooth Road ...to thyroid replacement therapy

ATIENTS CAN BE UCCESSFULLY IAINTAINED ON A RUG CONTAINING HYROXINE ALONE.

yroxine (T_4) is, as you know, e major circulating hormone oduced by the thyroid gland. is also produced, in smaller nounts, and is active at the llular level. For years it has been working hypothesis among docrinologists that T_4 is nverted by the body to T_3. In 70 this process, called eiodination," was demonstrated Braverman, Ingbar, and Sterling[2]. does convert to T_3, though the ecise quantities are still being udied.

The conversion has been nically demonstrated during the ministration of T_4 to athyrotic tients. Their thyroid status is rmalized on SYNTHROID alone, t the presence of T_3 in these tients has been clearly shown.

WHY DOES SYNTHROID COST LESS THAN SYNTHETIC DRUGS CONTAINING T_3?

Very simple. T_3 costs more to make synthetically than does T_4. So it is economically necessary for a synthetic thyroid medication containing T_3 to cost more than one containing T_4 alone. Synthetic combinations cost patients nearly 50% more than SYNTHROID[3] because the T_3 costs more to start with; also there is the additional expense of formulating a tablet containing two active ingredients.

1. Latiolais, C. J., and Berry, C. C.: Misuse of Prescription Medications by Outpatients, *Drug Intelligence & Clin. Pharm.* 3:270-7, 1969.
2. Braverman, L. E., Ingbar, S. H., and Sterling, K.: Conversion of Thyroxine (T4) to Triiodothyronine (T3) in Athyreotic Human Subjects, *J. Clin. Invest.* 49:855-64, 1970.
3. American Druggist BLUEBOOK, March, 1971.

Synthroid®

sodium levothyroxine)

HE FACTS ARE LEAR AND HERE S OUR OFFER.

ACTS:

ynthetic thyroid drugs are an nprovement over animal gland oducts. Patients, even athyrotic nes, can be completely aintained on SYNTHROID (T_4) one. Thyroid function tests are asy to interpret since they are *edictably* elevated when the atient adheres to SYNTHROID. all synthetic thyroid drugs, 'NTHROID is the most onomical to the patient.

A

OFFER:

Free TAB-MINDER medication dispensers to start or convert all your hypothyroid patients to SYNTHROID. Free information to physicians on role of thyroid function tests in a new booklet titled: "Guideposts to Thyroid Therapy." Ask us.

Name

Address

City State Zip

Indications: SYNTHROID (sodium levothyroxine) is specific replacement therapy for diminished or absent thyroid function resulting from primary or secondary atrophy of the gland, congenital defect, surgery, excessive radiation, or antithyroid drugs. Indications for SYNTHROID (sodium levothyroxine) **Tablets** include myxedema, hypothyroidism without myxedema, hypothyroidism in pregnancy, pediatric and geriatric hypothyroidism, hypopituitary hypothyroidism, simple (nontoxic) goiter, and reproductive disorders associated with hypothyroidism. SYNTHROID (sodium levothyroxine) **for Injection** is indicated for intravenous use in myxedematous coma and other thyroid dysfunctions where rapid replacement of the hormone is required. The injection is also indicated for intramuscular use in cases where the oral route is suspect or contraindicated due to existing conditions or to absorption defects, and when a rapid onset of effect is not desired.

Precautions: As with other thyroid preparations, an overdosage may cause diarrhea or cramps, nervousness, tremors, tachycardia, vomiting and continued weight loss. These effects may begin after four or five days or may not become apparent for one to three weeks. Patients receiving the drug should be observed closely for signs of thyrotoxicosis. If indications of overdosage appear, discontinue medication for 2-6 days, then resume at a lower dosage level. In patients with diabetes mellitus, careful observations should be made for changes in insulin or other antidiabetic drug dosage requirements. If hypothyroidism is accompanied by adrenal insufficiency, as Addison's Disease (chronic subcortical insufficiency), Simmonds's Disease (panhypopituitarism) or Cushing's syndrome (hyperadrenalism), these dysfunctions must be corrected prior to and during SYNTHROID (sodium levothyroxine) administration. The drug should be administered with caution to patients with cardiovascular disease; development of chest pains or other aggravations of cardiovascular disease requires a reduction in dosage.

Contraindications: Thyrotoxicosis, acute myocardial infarction. **Side effects:** The effects of SYNTHROID (sodium levothyroxine) therapy are slow in being manifested. Side effects, when they do occur, are secondary to increased rates of body metabolism; sweating, heart palpitations with or without pain, leg cramps, and weight loss. Diarrhea, vomiting, and nervousness have also been observed. Myxedematous patients with heart disease have died from abrupt increases in dosage of thyroid drugs. Careful observation of the patient during the beginning of any thyroid therapy will alert the physician to any untoward effects.

In most cases with side effects, a reduction of dosage followed by a more gradual adjustment upward will result in a more accurate indication of the patient's dosage requirements without the appearance of side effects.

Dosage and Administration: The activity of a 0.1 mg. SYNTHROID (sodium levothyroxine) TABLET is equivalent to approximately one grain thyroid, U.S.P. Administer SYNTHROID tablets as a single daily dose, preferably after breakfast. In hypothyroidism without myxedema, the usual initial adult dose is 0.1 mg. daily, and may be increased by 0.1 mg. every 30 days until proper metabolic balance is attained. Clinical evaluation should be made monthly and PBI measurements about every 90 days. Final maintenance dosage will usually range from 0.2-0.4 mg. daily. In adult myxedema, starting dose should be 0.025 mg. daily. The dose may be increased to 0.05 mg. after two weeks and to 0.1 mg. at the end of a second two weeks. The daily dose may be further increased at two-month intervals by 0.1 mg. until the optimum maintenance dose is reached (0.1-1.0 mg. daily).

Supplied: Tablets: 0.025 mg., 0.05 mg., 0.1 mg., 0.15 mg., 0.2 mg., 0.3 mg., 0.5 mg., scored and color-coded, in bottles of 100, 500, and 1000. Injection: 500 mcg. lyophilized active ingredient and 10 mg. of Mannitol, N.F., in 10 ml. single-dose vial, with 5 ml. vial of Sodium Chloride Injection, U.S.P., as a diluent. SYNTHROID (sodium levothyroxine) **for Injection** may be administered intravenously utilizing 200-400 mcg. of a solution containing 100 mcg. per ml. If significant improvement is not shown the following day, a repeat injection of 100-200 mcg. may be given.

FLINT LABORATORIES
DIVISION OF TRAVENOL LABORATORIES, INC.
Morton Grove, Illinois 60053

Generally, we would look with disfavor on subcommittees.

Also, the chairman of the committee will have the privilege of inviting guests, advisors, or consultants to meet with this committee as he feels they are needed.

Reporting to The Council

Currently, only committee recommendations are acted upon (approved, amended, or disapproved) by The Council, yet it must review *all* of the committee minutes whether or not recommendations are contained therein.

To reduce the volume of work by The Council, it is proposed that committee minutes become only a record of committee activities and be sent as information only to The Council and MSMS leadership. Any recommendations of the committee will be written as a Special Report with explanation, arguments, and background leading to a committee recommendation to The Council for formal Council action.

Special Reports of committee recommendations should be submitted for Council approval when the committee wishes to recommend (1) establishing a new MSMS policy, or changing existing MSMS policy, (2) inaugurating liaison with outside agencies which involve the committee acting as spokesman for the Michigan State Medical Society, (3) beginning new projects of major importance, especially those involving expenditure of funds not previously budgeted, or (4) other major decisions of similar importance.

Internal decisions for committee action which simply involve the implementation of ongoing projects need not be submitted as recommendations. These would be simply indicated as motions in the committee's minutes.

These Special Reports would be referred to the three standing committees of The Council, which would be:

1. Finance Committee
2. Legislative Policy Committee
3. Scientific and Educational Affairs Committee (this name is suggested for the present "County Societies" name which does not appropriately reflect its role in reviewing minutes which deal primarily with scientific and educational activities.)

After the standing committees have reviewed the Special Reports of the committees, they will submit their committee reports to The Council.

After The Council has rendered its opinion, the committee is to be immediately notified so it can proceed with its work. The report is then appended to the appropriate committee minutes, with the action of The Council noted, and placed in the permanent minute book of the committee.

Each year, for the record, the committee would prepare a summary of activities, based on its minutes and special reports, for distribution as information to The Council and the House of Delegates. A copy of the final report would be filed in the permanent minute book.

Planning and Priorities Committee

The purpose of the Planning and Priorities Committee is to develop a plan for the activities of MSMS, recommend priorities according to the relative importance of each, taking into consideration the available resources of MSMS.

The Planning and Priorities Committee is to be appointed by The Council and be composed of representation from The Council, the House of Delegates, the Council of Specialty Societies, and other members of MSMS.

Welcome

Members of the Michigan State Medical Society join in welcoming the following new members into a progressive state medical organization. MSMS is dedicated to promoting the science and art of medicine, the protection of the public health, and the betterment of the medical profession. Each new member is encouraged to join with other MSMS members at both the local and the state levels in achieving these goals.

Russell B. Dieterich, MD, 1846 Kreiser, S.E., Grand Rapids 49506
Joseph J. Gadbaw, MD, 33925 Oakland Ave., Farmington 48024
Heland Garapetian-Salmasi, MD, 308 N. Mead St., St. Johns 48879
George W. Greenman, MD, 2311 E. Stadium Blvd., Ann Arbor 48104
Syed M. Jalil, MD, 27634 Five Mile Rd., Detroit 48239
Joseph R. Novello, MD, University of Michigan, Ann Arbor 48103
Ismail D. Yanga, MD, 600 County Farm Rd., Howell 48843

if skin is infected, or open to infection...

choose the topicals that give your patient–

- broad antibacterial activity against susceptible skin invaders
- low allergenic risk—prompt clinical response

Special Petrolatum Base

Neosporin® Ointment

(polymyxin B-bacitracin-neomycin)

Each gram contains: Aerosporin® brand polymyxin B sulfate, 5000 units; zinc bacitracin, 400 units; neomycin sulfate 5 mg. (equivalent to 3.5 mg. neomycin base); special white petrolatum q. s.
In tubes of 1 oz. and ½ oz. for topical use only.

Vanishing Cream Base

Neosporin®-G Cream

(polymyxin B-neomycin-gramicidin)

Each gram contains: Aerosporin® brand polymyxin B sulfate, 10,000 units; neomycin sulfate, 5 mg. (equivalent to 3.5 mg. neomycin base); gramicidin, 0.25 mg., in a smooth, white, water-washable vanishing cream base with a pH of approximately 5.0. Inactive ingredients: liquid petrolatum, white petrolatum, propylene glycol, polyoxyethylene polyoxypropylene compound, emulsifying wax, purified water, and 0.25% methylparaben as preservative.
In tubes of 15 g.

NEOSPORIN for topical infections due to susceptible organisms, as in impetigo, surgical after-care, and pyogenic dermatoses.

Precaution: As with other antibiotic preparations, prolonged use may result in overgrowth of nonsusceptible organisms and/or fungi. Appropriate measures should be taken if this occurs. Articles in the current medical literature indicate an increase in the prevalence of persons allergic to neomycin. The possibility of such a reaction should be borne in mind.

Contraindications: Not for use in the external ear canal if the eardrum is perforated. These products are contraindicated in those individuals who have shown hypersensitivity to any of the components.

Complete literature available on request from Professional Services Dept. PML.

Wellcome

Burroughs Wellcome Co.
Research Triangle Park
North Carolina 27709

When irritable colon feels like this

...in the presence of spasm or hypermotility, gas distension and discomfort, **KINESED®** provides more complete relief:

☐ **belladonna alkaloids—for the hyperactive bowel**
☐ **simethicone—for accompanying distension and pain due to gas**
☐ **phenobarbital—for associated anxiety and tension**

Composition: Each chewable, fruit-flavored, scored tablet contains: 16 mg. phenobarbital (warning: may be habit-forming); 0.1 mg. hyoscyamine sulfate; 0.02 mg. atropine sulfate; 0.007 mg. scopolamine hydrobromide; 40 mg. simethicone.
Contraindications: Hypersensitivity to barbiturates or belladonna alkaloids, glaucoma, advanced renal or hepatic disease.
Precautions: Administer with caution to patients with incipient glaucoma, bladder neck obstruction or urinary bladder atony. Prolonged use of barbiturates may be habit-forming.
Side effects: Blurred vision, dry mouth, dysuria, and other atropine-like side effects may occur at high doses, but are only rarely noted at recommended dosages.
Dosage: Adults: One or two tablets three or four times daily. Dosage can be adjusted depending on diagnosis and severity of symptoms. Children 2 to 12 years: One half or one tablet three or four times daily. Tablets may be chewed or swallowed with liquids.

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(from the Greek **kinetikos**,
to move,
and the Latin **sedatus**,
to calm)

KINESED®

antispasmodic/sedative/antiflatulent

Spring peeper (tree frog, *Hyla crucifer*):
this small amphibian can expand
its throat membrane with air until it is
twice the size of its head.

Michigan mediscene

Feb. 7-10—Advances in Internal Medicine, postgraduate course, Towsley Center for Continuing Medical Education, University Medical Center, Ann Arbor, contact: Chairman, Department of Postgraduate Medical Education, Towsley Center, Ann Arbor, 48104

Feb. 9—Michigan Committee on Trauma, American College of Physicians, 6:30 p.m., MSMS Headquarters, contact: Thomas C. Blair, MD, 1322 E. Michigan Ave., Lansing, 48912

Feb. 10—Interim session, Michigan State Pharmaceutical Association, House of Delegates, Lansing, contact: Louis M. Sesti, RPh, MSPA director, 1812 Michigan National Tower, Lansing, 48933

Feb. 12—Annual seminar, Michigan Society of Pathologists, "The Role of the Laboratory in Clinical Immunology," 1:30 p.m. Henry Ford Hospital Auditorium, Detroit

March 12—Michigan Academy of Family Physicians, board meeting, MSMS Headquarters, contact: Louis R. Zako, MD, MAFP president, 7720 Allen Road, Allen Park, 48101

March 19—The Council, Sheraton Cadillac Hotel, Detroit, contact: Warren F. Tryloff, MSMS Headquarters

March 20-21—Spring Session, MSMS House of Delegates, Detroit Hilton Hotel, contact: Richard Campau, MSMS Headquarters

March 26—Michigan State Medical Assistants Society, board meeting, 11 a.m., MSMS Headquarters, contact: Mrs. Betty L. Boers, president, MSMAS, 1116 Sheridan, Kalamazoo, 49001

March 29—Muskegon Trauma Day, Holiday Inn, Muskegon, contact: Guida Anessa, MD, 205 Medical Center, Muskegon

March 29-30—Annual Michigan Conference on Maternal and Perinatal Health, Olds Plaza Hotel, Lansing, contact: Joseph L. Sheets, MD, 2909 E. Grand River, Lansing, or Helen Schulte, MSMS Headquarters

April 3—Annual Beaumont Lecture—Wayne County Medical Society, Detroit, contact: William Blodgett, MD, Wayne County Medical Society, 1010 Antietam, Detroit, 48207

April 5-8—49th Annual Meeting, American Orthopsychiatric Association, Cobo Hall, Detroit, contact: Sylvia F. Gruggett, AOA, 1790 Broadway, New York, N.Y., 10019

April 8—Health Careers Day, Michigan State University, sponsored by MSU and Michigan Health Council, contact: John A. Doherty, MHC, 712 Abbott, East Lansing, 48823

April 13-15—Michigan Heart Association Heart Days, Cobo Hall, Detroit, contact: Harold Arnow, publicity director, MHA, 13100 Puritan, Detroit, 48227

April 19—Woman's Auxiliary to MSMS, Legislative Day, Olds Plaza, Lansing, contact: Mrs. R. J. Westerhoff, 2458 Maplewood, SE, Grand Rapids, 49506

April 19-20—Woman's Auxiliary to MSMS, spring conference, Hospitality Inn, Lansing, contact: Mrs. Charles Schoff, 5209 Sunset Drive, Midland, 48640

April 26—The Council, MSMS Headquarters, contact: Warren F. Tryloff, MSMS Headquarters

April 27-30—Annual Convention, Michigan State Medical Assistants Society, Holiday Inn, Crosstown Parkway, Kalamazoo, contact: Mrs. Betty Boers, 1116 Sheridan, Kalamazoo, 49001

April 30-May 5—American Nurses Association Biennial Convention, Cobo Hall, Detroit, contact: Miss Virginia Stone, executive director, Detroit District, Michigan Nurses Association, 316 Fisher Building, Detroit, 48202

May 18-19—Annual Gull Lake meeting, MSMS Committee on Maternal and Perinatal Health, Kellogg Biological Station, Gull Lake, contact: Helen Schulte, MSMS Headquarters

May 20-27—Michigan Week

May 22-23—Michigan Chapter meeting and scientific session of the American College of Emergency Physicians, Shanty Creek, Bellaire, contact: Gaius Clark, MD, 865 Pebblebrook Lane, East Lansing, 48823

June 2-3—Gaylord Trauma Day, Hidden Valley Otsego Ski Club, Gaylord, contact: Benjamin Henig, MD, Keyport Clinic, 308 Michigan Ave., Grayling, 49738

June 5-7—Initial Management of the Acutely Ill and Injured Patient, Ann Arbor, contact: Charles F. Frey, MD, Department of Surgery, University of Michigan Medical Center, Ann Arbor, 48104

June 7—The Council, MSMS Headquarters, contact: Warren F. Tryloff, MSMS Headquarters

June 18-22—Many Michigan physicians will attend AMA Annual Convention in San Francisco

June 23-24—Annual Meeting, Upper Peninsula Medical Society, Holiday Inn, Marquette, contact: Thomas B. Bolitho, MD, UPMS president, 1414 W. Fair Ave., Marquette, 49855

July 27-28—Coller-Penberthy-Thirlby Conference, Park Place Motor Inn, Traverse City, contact: L. P. Skendzel, MD, Traverse City, chairman

Oct. 1 and 4—The Council, Sheraton-Cadillac Hotel, Detroit, contact: Warren F. Tryloff, MSMS Headquarters

Oct. 1-5—107th Annual Session of the Michigan State Medical Society, Sheraton-Cadillac Hotel, Detroit, contact: Richard Campau, MSMS Headquarters, 120 W. Saginaw, East Lansing, 48823

Nov. 8—The Council, special meeting, noon, MSMS Headquarters, contact: Warren F. Tryloff, MSMS Headquarters

Dec. 6—The Council, MSMS Headquarters, contact: Warren F. Tryloff, MSMS Headquarters

Note from Jim Imboden about 'your opinion please'

James Imboden, AMA Field representative for Michigan, recently sent the following note to his boss, R. G. Layton, director of the AMA field service department:

"Attached are the opinions of several Michigan physicians regarding prepaid group practice, from the November, 1971 issue of *Michigan Medicine*, 'Your opinion please' section.

"There is some really outstandingly clear thinking on the part of these fellows and I knew that you would be interested in what they have to say.

"Incidentally, Dick, this portion of the journal, 'Your opinion please,' is one which appears regularly in *Michigan Medicine* and I have found it one of the most interesting segments to be found in any medical journal anywhere. . . . It really gives you that grass roots thinking and it's for sure it doesn't pay to ever get too far away from 'what the doctor is thinking.' "

These Michigan doctors took part in AMA convention

Eleven Michigan physicians were on the program of the 1971 AMA Clinical Convention Nov. 28-Dec. 1 in New Orleans.

Richard W. Schneider, MD, Ann Arbor, presided over a meeting on "Innovations in Sports Medicine through State Medical Societies"; while James P. Muldoon, MD, Grand Rapids, made a presentation on "The Management of Acute Diverticulitis of the Colon."

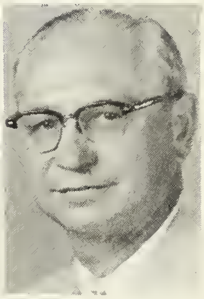
Franklin V. Wade, MD, Flint, as a member of the Special Exhibit Committee on Fractures, took part in continuous demonstrations of the management of fractures of the hand, ankle and knee in the exhibit center.

Doctors Robert E. Burns, Joseph P. Abraham and Thomas A. Chapel of Detroit represented Henry Ford Hospital with an exhibit on "Visible Evidence of Red Cell Disease"; while a display entitled "Can Oral Penicillin Be Malabsorbed?" was presented by Evelyn J. Fisher, MD, E. L. Quinn, MD, Frank Cox, MD, W. Haubrich, MD, and J. Ponka, MD, also of Henry Ford Hospital.

Doctor Furlong

Doctor Harris

Doctor Heidenreich



Doctor Leader

Four MSMS members end dedicated service as AMA delegates

Four Michigan physicians have retired after giving long and dedicated service to MSMS as delegates to the AMA. They are Harold Furlong, MD, Pontiac, and Bradley Harris, MD, Ann Arbor, who were alternate delegates, and John R. Heidenreich, MD, Menominee, and Luther R. Leader, MD, Pontiac, who were full MSMS delegates.

The four doctors' terms of office ended Dec. 31.

Taking their places at the next AMA meeting June 18-22 in San Francisco will be John W. Moses, MD, Detroit, and Paul T. Lahti, MD, Royal Oak, who were moved from the position of alternate delegate to full delegate at the MSMS Annual Session Oct. 3-7 in Grand Rapids. Four new alternate delegates were elected at the Annual Session to replace the retiring Doctor Harris and Doctor Furlong and the promoted Doctor Moses and Doctor Lahti. The new alternates are Frank B. Walker II, MD, Grosse Pointe; Donald T. Anderson, MD, Kingsford; Richard McMurray, MD, Flint, and Brooker L. Masters, MD, Fremont.

In small doses

Mario M. Chaves, MD, of Brazil, is the new program director for the Latin American interests of the W. K. Kellogg Foundation. Doctor Chaves holds both dentistry and medicine degrees and most recently was associate director of the Pan American Federation of Associations of Medical Schools and of the Latin American Association of Dental Schools.

Julio C. Davila, MD, of San Francisco, is new chief of the Thoracic Surgery Division at Henry Ford Hospital, Detroit.

Andrew D. Hunt, Jr., MD, East Lansing, dean of the MSU College of Human Medicine, is new president of the board of directors of the Michigan Association for Regional Medical Programs. New vice president is John Gronvall, MD, dean of the U-M Medical School, and new secretary-treasurer is D. Bonta Hiscoe, MD, Lansing, past president, Ingham County Medical Society.

Fernando Leon, MD, Detroit, is the winner for the second time of the semiannual Semmes Awards at Bon Secours Hospital, Grosse Pointe, for displaying genuine interest in and sympathetic attitude toward patients and their families.

Donald F. Moore, MD, formerly of Kalamazoo, is new president of the Central Neuropsychiatric Association. The association serves neurologists, neurosurgeons and psychiatrists for the central, southern and western states. Doctor Moore is now professor of psychiatry at Indiana University School of Medicine.

Harry A. Towsley, MD, Ann Arbor, who retired in June as chairman of the Department of Postgraduate Medical Education at the University of Michigan, was honored recently by the Midland County Medical Society at a dinner and reception. The event was staged in conjunction with the MSMS Fall PG course in Midland, which is to be renamed locally the Harry Towsley Clinic Day. Doctor Towsley, who is still with the U-M Medical Center as editor of the *Medical Center Journal,* is a native Midlander.

Gerald S. Wilson, MD, Detroit, is new chairman of the board of the Michigan Cancer Foundation. Doctor Wilson is joined by new board member Ethelene J. Crockett, MD. Doctor Wilson is chief of surgery at The Grace Hospital and Doctor Crockett is vice chairman of the board of the Regional Medical Programs and board member of the Comprehensive Health Planning Council, the Health Council of New Detroit, Inc., and the United Community Services.

Pre-Sate® **(chlorphentermine hydrochloride)**

Caution: Federal law prohibits dispensing without prescription.

Indications

Pre-Sate (chlorphentermine hydrochloride) is indicated in exogenous obesity, as a short term (i.e. several weeks) adjunct in a regimen of weight reduction based upon caloric restriction.

Contraindications

Glaucoma, hyperthyroidism, pheochromocytoma, hypersensitivity to sympathomimetic amines, and agitated states. Pre-Sate (chlorphentermine hydrochloride) is also contraindicated in patients with a history of drug abuse or symptomatic cardiovascular disease of the following types: advanced arteriosclerosis, severe coronary artery disease, moderate to severe hypertension, or cardiac conduction abnormalities with danger of arrhythmias. The drug is also contraindicated during or within 14 days following administration of monamine oxidase inhibitors, since hypertensive crises may result.

Warnings

When weight loss is unsatisfactory the recommended dosage should not be increased in an attempt to obtain increased anorexigenic effect; discontinue the drug. Tolerance to the anorectic effect may develop. Drowsiness or stimulation may occur and may impair ability to engage in potentially hazardous activities such as operating machinery, driving a motor vehicle, or performing tasks requiring precision work or critical judgment. Therefore, such patients should be cautioned accordingly. Caution must be exercised if Pre-Sate (chlorphentermine hydrochloride) is used concomitantly with other central nervous system stimulants. There have been reports of pulmonary hypertension in patients who received related drugs.

Drug Dependence Drugs of this type have a potential for abuse. Patients have been known to increase the intake of drugs of this type to many times the dosages recommended. In long-term controlled studies with the high dosages of Pre-Sate, abrupt cessation did not result in symptoms of withdrawal.

Usage In Pregnancy The safety of Pre-Sate (chlorphentermine hydrochloride) in human pregnancy has not yet been clearly established. The use of anorectic agents by women who are or who may become pregnant, and especially those in the first trimester of pregnancy, requires that the potential benefit be weighed against the possible hazard to mother and child. Use of the drug during lactation is not recommended. Mammalian reproductive and teratogenic studies with high multiples of the human dose have been negative.

Usage In Children Not recommended for use in children under 12 years of age.

Precautions

In patients with diabetes mellitus there may be alteration of insulin requirements due to dietary restrictions and weight loss. Pre-Sate (chlorphentermine hydrochloride) should be used with caution when obesity complicates the management of patients with mild to moderate cardiovascular disease or diabetes mellitus, and only when dietary restriction alone has been unsuccessful in achieving desired weight reduction. In prescribing this drug for obese patients in whom it is undesirable to introduce CNS stimulation or pressor effect, the physician should be alert to the individual who may be overly sensitive to this drug. Psychologic disturbances have been reported in patients who concomitantly receive an anorectic agent and a restrictive dietary regimen.

Adverse Reactions

Central Nervous System: When CNS side effects occur, they are most often manifested as drowsiness or sedation or overstimulation and restlessness. Insomnia, dizziness, headache, euphoria, dysphoria, and tremor may also occur. Psychotic episodes, although rare, have been noted even at recommended doses. **Cardiovascular:** tachycardia, palpitation, elevation of blood pressure. **Gastrointestinal:** nausea and vomiting, diarrhea, unpleasant taste, constipation. **Endocrine:** changes in libido, impotence. **Autonomic:** dryness of mouth, sweating, mydriasis. **Allergic:** urticaria. **Genitourinary:** diuresis and, rarely, difficulty in initiating micturition. **Others:** Paresthesias, sural spasms.

Dosage and Administration

The recommended adult daily dose of Pre-Sate (chlorphentermine hydrochloride) is one tablet (equivalent to 65 mg chlorphentermine base) taken after the first meal of the day. Use in children under 12 not recommended.

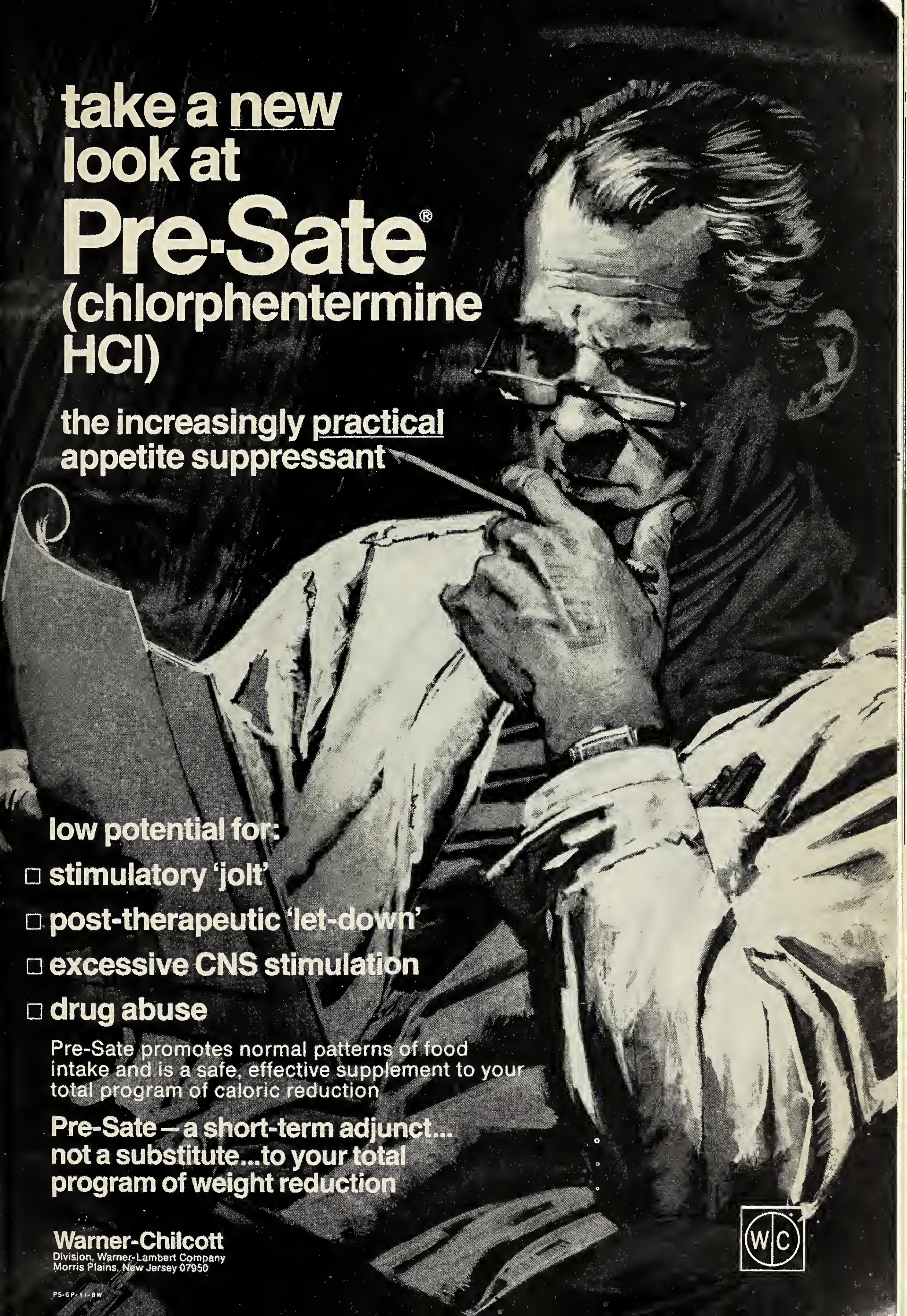
Overdosage

Manifestations: Restlessness, confusion, assaultiveness, hallucinations, panic states, and hyperpyrexia may be manifestations of acute intoxication with anorectic agents. Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension, or hypotension and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Fatal poisoning usually terminates in convulsions and coma.

Management: Management of acute intoxication with sympathomimetic amines is largely symptomatic and supportive and often includes sedation with a barbiturate. If hypertension is marked, the use of a nitrate or rapidly acting alpha-receptor blocking agent should be considered. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendations in this regard.

How Supplied

Each Pre-Sate (chlorphentermine hydrochloride) tablet contains the equivalent of 65 mg chlorphentermine base; bottles of 100 and 1000 tablets.



take a new look at **Pre-Sate®** (chlorphentermine HCl)

the increasingly practical appetite suppressant

low potential for:

☐ stimulatory 'jolt'

☐ post-therapeutic 'let-down'

☐ excessive CNS stimulation

☐ drug abuse

Pre-Sate promotes normal patterns of food intake and is a safe, effective supplement to your total program of caloric reduction

Pre-Sate — a short-term adjunct... not a substitute...to your total program of weight reduction

Warner-Chilcott
Division, Warner-Lambert Company
Morris Plains, New Jersey 07950

WC

PS-GP-11-BW

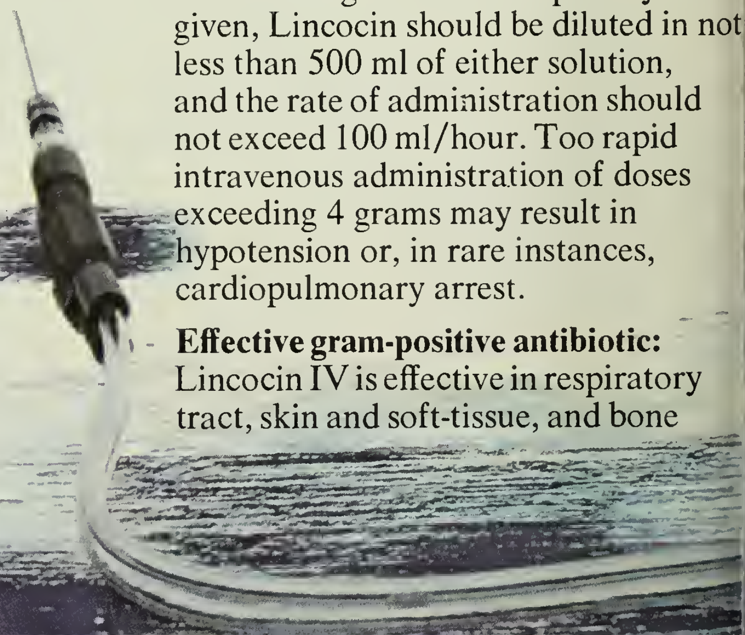
When you select this familiar antibiotic for IV infusion you have available a broad dosage range that hospitalized patients may need.

Intravenous Lincocin (lincomycin hydrochloride, Upjohn), with its 1.2 to 8 grams/day dosage range, covers many serious and even life-threatening infections. Lincocin is effective in infections due to susceptible strains of streptococci, pneumococci, and staphylococci. Lincocin IV therefore can be as useful in your hospitalized patients as its IM use has proved to be in your office patients. As with all antibiotics, *in vitro* susceptibility studies should be performed.

1.2 to 8 grams/day IV dosage range: Most hospitalized patients with uncomplicated pneumonias respond satisfactorily to 1.2 to 1.8 grams/day of Lincocin IV. These doses may have to be increased for more serious infections. In life-threatening situations as much as 8 grams/day has been administered intravenously to adults.

In usual IV doses, Lincocin (lincomycin hydrochloride, Upjohn) should be diluted in 250 ml or more of normal saline solution or 5% glucose in water. But when 4 grams or more per day is given, Lincocin should be diluted in not less than 500 ml of either solution, and the rate of administration should not exceed 100 ml/hour. Too rapid intravenous administration of doses exceeding 4 grams may result in hypotension or, in rare instances, cardiopulmonary arrest.

Effective gram-positive antibiotic: Lincocin IV is effective in respiratory tract, skin and soft-tissue, and bone



nfections caused by susceptible strains
f pneumococci, streptococci, and
taphylococci, including penicillin-
esistant strains. Staphylococcal strains
esistant to Lincocin (lincomycin
ydrochloride, Upjohn) have been
ecovered. Before initiating therapy,
ulture and susceptibility studies should
e performed. Lincocin has proved
aluable in treating patients hyper-
ensitive to penicillin or cephalosporins,
ince Lincocin does not share
ntigenicity with these compounds.
lowever, hypersensitivity reactions
ave been reported, some of these in
atients known to be sensitive to
enicillin.

Vell tolerated at infusion site: Lincocin
ntravenous infusions have not
roduced local irritation or phlebitis,
hen given as recommended. Lincocin
usually well tolerated in patients who
re hypersensitive to other drugs.
Jevertheless, Lincocin should be used
autiously in patients with asthma or
ignificant allergies.

n patients with impaired renal function,
ne recommended dose of Lincocin
hould be reduced to 25–30% of
ne dose for patients with normal
idney function. Its safety in
regnant patients and in infants
ess than one month of age has
ot been established.

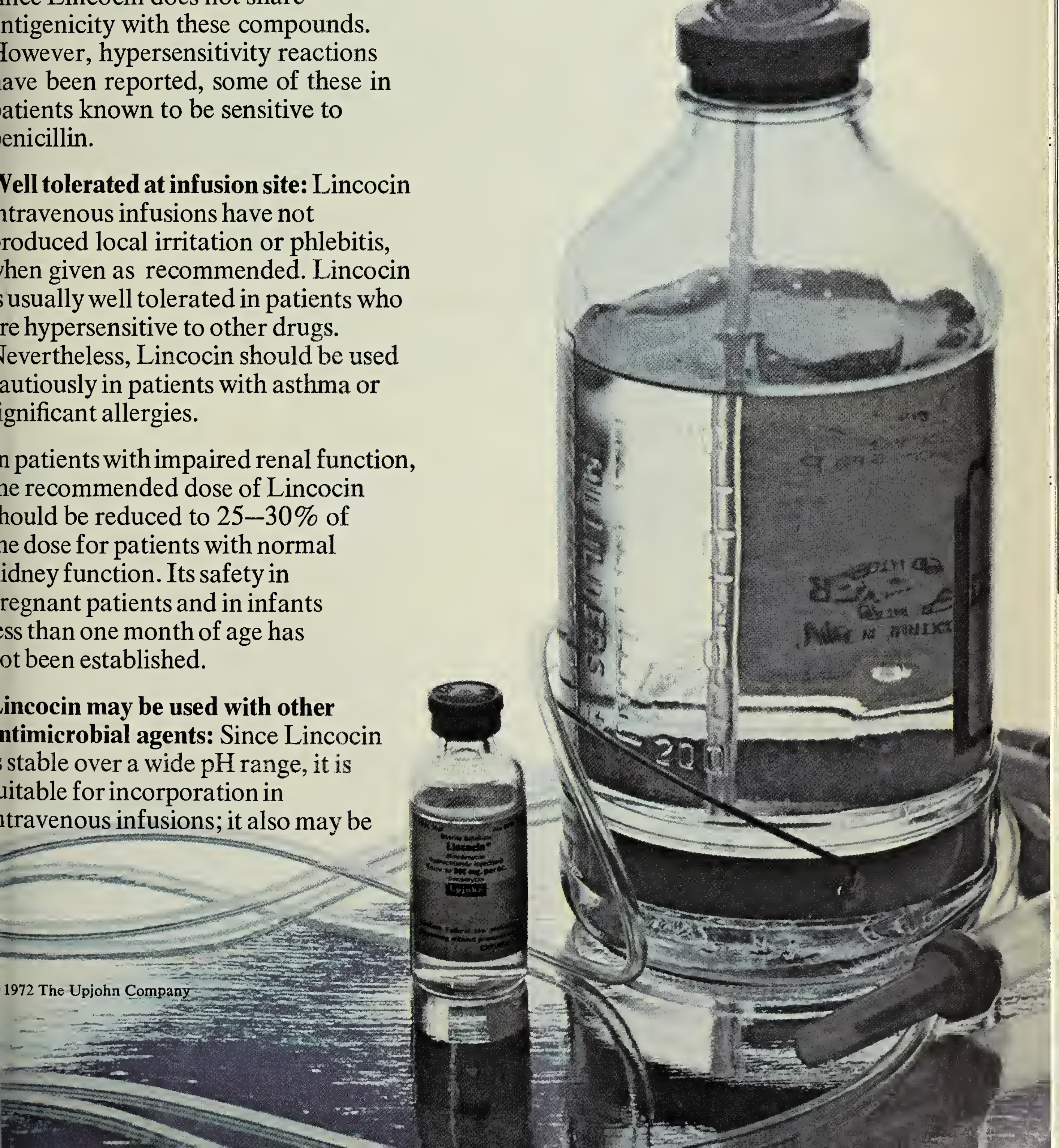
**incocin may be used with other
ntimicrobial agents:** Since Lincocin
stable over a wide pH range, it is
itable for incorporation in
ntravenous infusions; it also may be administered concomitantly with other antimicrobial agents when indicated. However, Lincocin should not be used with erythromycin, as *in vitro* antagonism has been reported.

Lincocin®

Sterile Solution (300 mg per ml)

(lincomycin hydrochloride, Upjohn)

For further prescribing information, please see following page.



1972 The Upjohn Company

Sterile Solution (300 mg. per ml.)

Lincocin®

(lincomycin hydrochloride, Upjohn)

Up to 8 grams per day by IV infusion for hospitalized patients with life-threatening infections. Lincocin is effective in infections due to susceptible strains of streptococci, pneumococci, and staphylococci. As with all antibiotics, *in vitro* susceptibility studies should be performed.

Each preparation contains:	Lincomycin hydrochloride monohydrate equivalent to lincomycin base
250 mg Pediatric Capsule	250 mg
500 mg Capsule	500 mg
*Sterile Solution per 1 ml	300 mg
Syrup per 5 ml	250 mg

*Contains also: Benzyl Alcohol 9 mg; and, Water for Injection—q.s.

Lincocin (lincomycin hydrochloride) is indicated in infections due to susceptible strains of staphylococci, pneumococci, and streptococci. *In vitro* susceptibility studies should be performed. Cross resistance has not been demonstrated with penicillin, ampicillin, cephalosporins, chloramphenicol or the tetracyclines. Some cross resistance with erythromycin has been reported. Studies indicate that Lincocin does not share antigenicity with penicillin compounds.

CONTRAINDICATIONS: History of prior hypersensitivity to lincomycin or clindamycin. Not indicated in the treatment of viral or minor bacterial infections.

WARNINGS: *CASES OF SEVERE AND PERSISTENT DIARRHEA HAVE BEEN REPORTED AND HAVE AT TIMES NECESSITATED DISCONTINUANCE OF THE DRUG. THIS DIARRHEA HAS BEEN OCCASIONALLY ASSOCIATED WITH BLOOD AND MUCUS IN THE STOOLS AND HAS AT TIMES RESULTED IN AN ACUTE COLITIS. THIS SIDE EFFECT USUALLY HAS BEEN ASSOCIATED WITH THE ORAL DOSAGE FORM BUT OCCASIONALLY HAS BEEN REPORTED FOLLOWING PARENTERAL THERAPY.* A careful inquiry should be made concerning previous sensitivities to drugs or other allergens. Safety for use in pregnancy has not been established and Lincocin (lincomycin hydrochloride) is not indicated in the newborn. Reduce dose 25 to 30% in patients with severe impairment of renal function.

PRECAUTIONS: Like any drug, Lincocin should be used with caution in patients having a history of asthma or significant allergies. Overgrowth of nonsusceptible organisms, particularly yeasts, may occur and require appropriate measures. Patients with pre-existing monilial infections requiring Lincocin therapy should be given concomitant antimonilial treatment. During prolonged Lincocin therapy, periodic liver function studies and blood counts should be performed. Not recommended (inadequate data) in patients with pre-existing liver disease unless special clinical circumstances indicate. Continue treatment of β-hemolytic streptococci infections for 10 days to diminish likelihood of rheumatic fever or glomerulonephritis.

ADVERSE REACTIONS: *Gastrointestinal*—Glossitis, stomatitis, nausea, vomiting. Persistent diarrhea, enterocolitis, and pruritus ani. *Hemopoietic*—Neutropenia, leukopenia, agranulocytosis, and thrombocytopenic purpura have been reported. *Hypersensitivity reactions*—Hypersensitivity reactions such as angioneurotic edema, serum sickness, and anaphylaxis have been reported, sometimes in patients sensitive to penicillin. If allergic reaction occurs, discontinue drug. Have epinephrine, corticosteroids, and antihistamines available for emergency treatment: *Skin and mucous membranes*—Skin rashes urticaria, vaginitis, and rare instances of exfoliative and vesiculobullous dermatitis have been reported. *Liver*—Although no direct relationship to liver dysfunction is established, jaundice and abnormal liver function tests (particularly serum transaminase) have been observed in a few instances. *Cardiovascular*—Instances of hypotension following parenteral administration have been reported, particularly after too rapid IV administration. Rare instances of cardiopulmonary arrest have been reported after too rapid IV administration. If 4.0 grams or more administered IV, dilute in 500 ml of fluid and administer no faster than 100 ml per hour. *Special senses*—Tinnitus and vertigo have been reported occasionally. *Local reactions*—Excellent local tolerance demonstrated to intramuscularly administered Lincocin (lincomycin hydrochloride). Reports of pain following injection have been infrequent. Intravenous administration of Lincocin in 250 to 500 ml of 5% glucose in distilled water or normal saline has produced no local irritation or phlebitis.

HOW SUPPLIED: *250 mg* and *500 mg* Capsules—bottles of 24 and 100. *Sterile Solution, 300 mg per ml*—2 and 10 ml vials and 2 ml syringe. *Syrup, 250 mg per 5 m*—60 ml and pint bottles.

For additional product information, consult the package insert or see your Upjohn representative.

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P-300: Superior protectio

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P-300–superior to other antibacterial bar soaps. Proven effective against 25 of 31 cultures representing bacteria of major concern in nosocomial infections and cross-infections.*

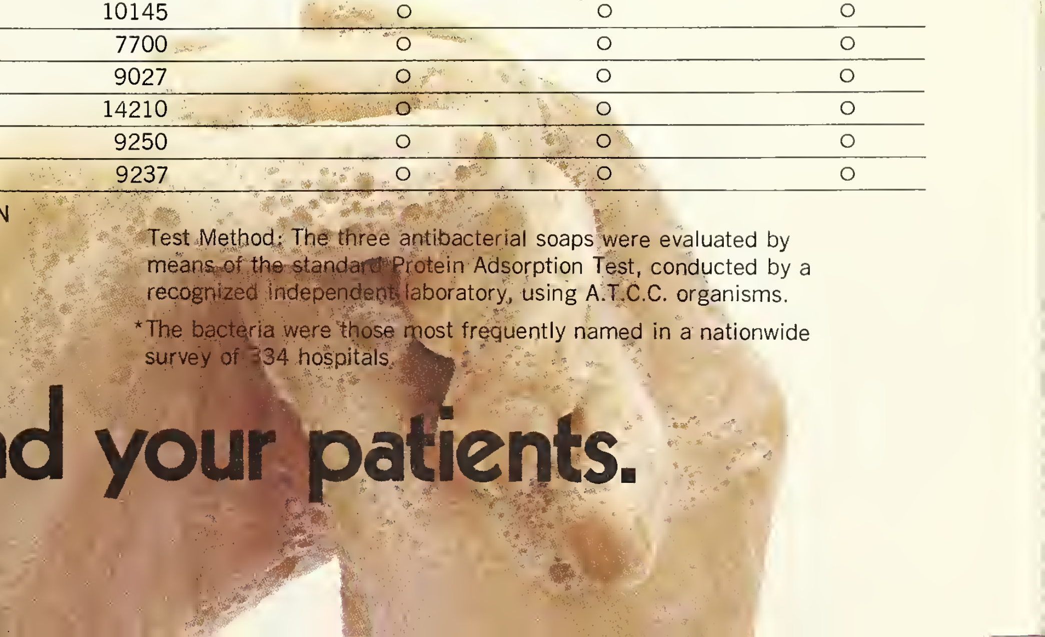
BACTERIA	A.T.C.C. No.	P-300	Soap "D"	Soap "S"
Gram Positive				
Staphylococcus aureus	8094	🟣🟡🟠	🟠	🟠
Staphylococcus aureus	11371	🟣🟡🟠	🟠	🟠
Staphylococcus aureus	8096	🟣🟡🟠	🟠	🟠
Staphylococcus aureus	10390	🟣🟡🟠	🟠	🟠
Staphylococcus aureus	6342	🟣🟡🟠	🟠	🟠
Staphylococcus epidermidis	17917	🟣🟡🟠	🟠	🟠
Staphylococcus sp.	13565	🟣🟡🟠	🟠	🟡🟠
Mycobacterium smegmatis	19420	🟣🟡🟠	🟡🟠	🟡🟠
Listeria monocytogenes	13932	🟣🟡🟠	🟡🟠	🟣🟡🟠
Streptococcus pyogenes	7958	🟠	🟠	🟠
Streptococcus mitis	903	🟠	🟠	🟠
Streptococcus sp.	12403	🟠	🟠	🟠
Bacillus anthracis	14578	🟠	🟡🟠	🟡🟠
Gram Negative				
Alcaligenes tolerans	19359	🟣🟡🟠	🟡🟠	🟣🟡🟠
Neisseria gonorrhoeae	19424	🟡🟠	🟠	🟠
Neisseria menigitidis	13077	🟣🟡🟠	🟠	🟠
Proteus vulgaris	8427	🟣🟡🟠	🟠	○
Escherichia coli	10536	🟠	○	○
Escherichia coli	11229	🟠	○	○
Escherichia coli	11698	🟠	○	○
Klebsiella pneumoniae	12833	🟠	○	○
Salmonella typhi	9993	🟠	○	○
Salmonella typhi	6539	🟠	○	○
Salmonella typhimurium	13311	🟠	○	○
Herellea sp.	11959	🟠	○	○
Pseudomonas aeruginosa	10145	○	○	○
Pseudomonas aeruginosa	7700	○	○	○
Pseudomonas aeruginosa	9027	○	○	○
Pseudomonas aeruginosa	14210	○	○	○
Proteus rettgeri	9250	○	○	○
Proteus morganii	9237	○	○	○

KEY: ZONE OF INHIBITION

🟣🟡🟠 = 18.0 mm or larger
🟡🟠 = 12.0 mm to 17.9 mm
🟠 = Less than 11.9 mm
○ = No Inhibition

Test Method: The three antibacterial soaps were evaluated by means of the standard Protein Adsorption Test, conducted by a recognized independent laboratory, using A.T.C.C. organisms.

*The bacteria were those most frequently named in a nationwide survey of 334 hospitals.



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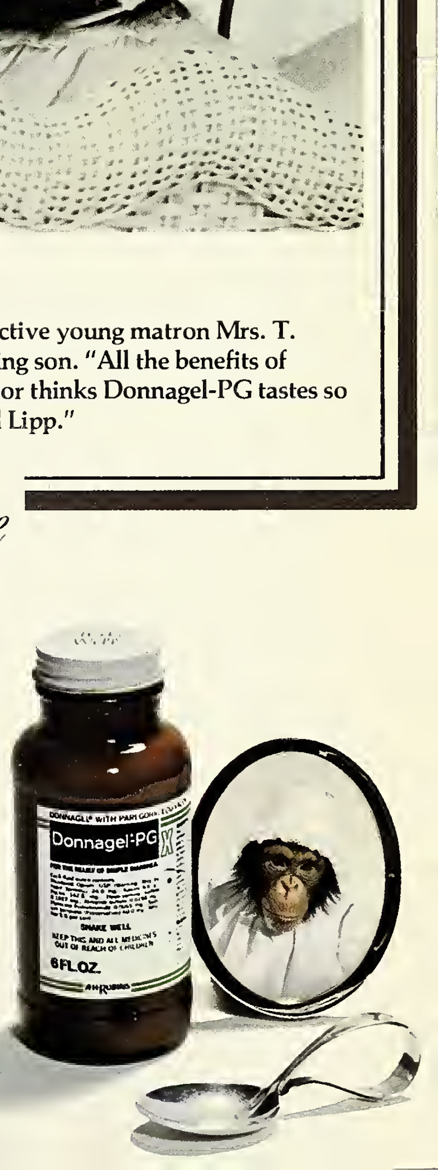
A-H-ROBINS



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Each 5 cc. contains:

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(warning: may be habit forming)	
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Non-narcotic for 6-8 hr. cough control

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Glyceryl guaiacolate	100.0 mg.
Dextromethorphan hydrobromide	15.0 mg.
Alcohol, 1.4%	

Clears sinuses and nasal stuffiness as it relieves cough

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ROBITUSSIN A-C®	●	●			
ROBITUSSIN-DM®	●		●		●
ROBITUSSIN-PE®				●	●
COUGH CALMERS®	AHR		AHR		AHR

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A-H-ROBINS

"How medical students are taught" —a revolution is in progress

This article was developed for MICHIGAN MEDICINE to help interpret to MSMS members and the public some of the many changes and improvements in medical schools and medical education. The article is based on a recent report of the AMA Council on Medical Education entitled, "How Medical Students Are Being Taught." The suggestion that this information be presented to MSMS members was made by Donald N. Sweeny, Jr., MD, chairman of the MSMS delegation to the AMA House of Delegates in his report to the 1971 MSMS House of Delegates. This article was written by Herbert A. Auer, staff assistant to the MSMS Education Liaison Committee and manager of the MSMS Department of Communications.

The changes in medical schools since 1950 "add up to a revolution in medical education only slightly less significant than the revolution that followed the Flexner Report."

That assessment is made by the AMA Council on Medical Education.

The Council, in a report accepted by the AMA House of Delegates, observes that "These changes in medical education have resulted from many influences, some arising within the medical schools, some outside them. It is believed that neither the general public nor the medical profession fully appreciates the magnitude and the significance of these changes."

Since 1950, medical schools have been seriously concerned about their curricula and their teaching methods. Perhaps the first major break with the traditional undergraduate medical school curriculum came with the introduction of a new curriculum at Western Reserve University School of Medicine in 1952. As time went on, revision of the curricula involved more and more medical schools, and the changes became greater and more significant.

"Now it is virtually impossible to find in any medical school what would have been considered in 1950 an orthodox curriculum," the AMA Council observes.

Perhaps the greatest change in the medical school curricula has been the early introduction of significant contact with patients. This certainly is true at the three Michigan medical schools.

There has been an increase in electives for the students and a reduction in the number of required courses. Now, typically, about one-quarter of the curricular time is given over to electives distributed more or less evenly throughout the curriculum, although tending to be concentrated toward the latter part. In a number of schools, the entire fourth year is elective.

Some schools have developed so-called "tracks." For example, a student may choose a family practice track, a medical or surgical specialty track, a behavioral track, or a medical science track. For the first year or year and one-half of the curriculum, the students are all exposed to a basic core of material mostly composed of the basic sciences. After this core is completed, each student may choose one track to pursue.

In some schools the fourth year is spent in what essentially is a straight internship in a teaching hospital.

Another general change has been the increasing use of clinical facilities of community hospitals, neighborhood health centers, and other types of community facilities, exposing the student to a variety of patterns of delivery of medical care, rather than restricting his exposure to medicine as practiced in the teaching hospital. This involves an increase in the use of part-time and volunteer faculty members.

The AMA Council reports a decrease in the total amount of scheduled classroom time. Whereas, formerly, medical students in the basic science years might actually be in classes as many as 44 hours weekly, now, 25 to 30 hours is more typical. This reduction in time has been accomplished mainly through reducing laboratory instruction. Basic science teaching now occupies about a year instead of the former two years.

A growing number of medical schools encourage students to progress through the curriculum at different rates, accompanied by efforts to devise better methods of assessing competence that there may be more emphasis on mastery of material and less emphasis on the amount of time spent in school.

Among other curricula changes have been the involvement of university departments outside the medical school in the teaching of the basic medical sciences; an increase in the use of visual aids and self-instruction methods of various sorts; more widespread involvement of the social sciences in the medical school curricula; and the organization of Departments of Research in Medical Education with new faculty members with doctor's degrees in education.

"There has been a tendency," the AMA Council observes, "for the medical school to assume responsibility for the development and operation of programs involving the provision of medical care to certain population groups in order to provide clinical experience for the student under conditions that would not otherwise be available to him."

A growing number of medical schools have started or are considering programs to train family physicians.

The AMA Council also reports a decrease in the total duration of undergraduate medical education. In some schools, it has long been possible for a few exceptional students to obtain the MD degree in three years. This is becoming more common.

The AMA Council points to these three major developments in medical education:

"1. Expansion of enrollment, encouraged and, in part, made possible by some of the curricular changes mentioned.

"2. Attention to increasing enrollment of students from groups seriously under-represented in the American medical profession. This involves changes in admission standards, provision of remedial programs, arrangements for students to progress through the curriculum at different rates, and augmentation of financial aid.

"3. The assumption by students of a substantial role in the operation and governance of the medical school, in part, through membership on various committees including, in some instances, the executive committee."

These three developments along with changes in teaching "represent an effort to relate the education of medical students more directly to the provision of medical care and to the health problems of society," the AMA Council told the House of Delegates.

1972 SAMA-MECO project already underway

Work has started on the 1972 Student American Medical Association-Medical Education and Community Orientation (SAMA-MECO) summer project which will place medical students in community hospitals throughout Michigan. Fifty students participated in the 10-week 1971 program. Both the students and officials of the hospitals involved reported enthusiastically on success of the program, designed to provide valuable experience for the students and to encourage them to consider community medical practice.

John Bruder, a junior medical student at Wayne State University, is coordinating the program among SAMA members in Michigan, with the Michigan State Medical Society handling overall coordination. For additional information, contact the MSMS Education Liaison Committee, MSMS, Box 950, East Lansing, Mich. 48823.

44 Physician assistant programs in USA now; WMU "developing"

The *Survey of Operational Physician Assistant Programs* published in March, 1971 by HEW reports that the following schools will graduate the following numbers of graduates in June 1972:

148 Graduates—Marine Physician's Assistant Program, U.S. Public Health Service Hospital, Staten Island, N.Y., (one-year program)

74 physician's associates, Duke University (two years)

46 ophthalmic assistants, Baylor University (14 months)

35 cardiopulmonary technicians, Spokane, Wash., Community College (two years)

33 physician assistants, Medex, U. of Washington (15 months)

22 physician assistants, Medex, U. of Alabama (one year)

22 physicians assistants, Medex, Dartmouth (one year)

There are 39 operational programs now training physician's assistants. Nineteen of these are training generalists; 15 are training specialists; 5 are training both specialists and generalists. There are five additional programs, including Western Michigan University's, which are classified as "developing programs."

The AMA has assumed a new leadership role in developing and sponsoring a national certification program for the assistant to the primary care physician. The Association's Council on Health Manpower will develop a blueprint for carrying out a certification program and present it to the House of Delegates at its June's annual convention.

60% of applicants rejected by med schools, says NABSP

The National Association of Blue Shield Plans reports that despite record U.S. medical school enrollments this fall, preliminary statistics indicate that 60 percent of all applicants for admission were rejected.

As the 1971-72 academic year opened first-year classes totaled an estimated 11,858, an increase of 498 from the estimated 11,360 first-year class last year. Total enrollment climbed to an estimated 43,063, compared with 40,185 last year. The 11,858 new students were accepted from approximately 25,000 applicants. Five new medical schools were opened, bringing the total number of U. S. medical schools to 108.

Is there an HMO in your future?

By Herbert Mehler
Chief, Research and Analysis
Government Medical Programs

The issue is here. Physicians are faced with alternatives to traditional solo, partnership or corporate practice of medicine: *The HMO* is one of the alternatives.

Interest, diverse reaction and broad speculation have been provoked about health maintenance organizations.

An HMO has been described as an aggregate of four constituent parts: a group of providers, appropriate facilities, a method of financing medical care through prepayment, and a population enrolled for the services.

The debate in Congress and in Michigan is now enjoined as to what direction we will take and how rapidly we will move for new kinds of incentives to deliver health care in the 1970's. These incentives range from HMOs, as supported by the national administration, to "comprehensive health services organizations," "health care corporations," and "health services and health education corporations."

The Department of Health, Education, and Welfare, which probably would have responsibility for HMOs, has enunciated the following basic requirements:

1. For a new, free-standing HMO, a minimum initial enrollment of 10,000, with prospects for 25,000 to 30,000 within two years.
2. Strong administrative leadership in existence and well accepted by all participants by the time of the design and implementation stage.
3. Compatibility with and access to portions of the existing health care system of the area as a back-up resource.
4. Demonstration that the HMO has complied with, or is satisfactorily in the process of complying with, all of the applicable corporate practice laws, licensure laws, hospital certification regulations, professional regulations and other legal considerations.
5. Demonstration that the HMO can manage anticipated fiscal deficits during the initial operating period.
6. The modern business management mechanism (which has been found so necessary by groups who have operated prepaid capitation health care systems) that can produce the specific accounting and data information which will be required of HMOs.
7. An understanding of the need for community outreach and active consumer participation in its organization and operation.

The MSMS Committee on Governmental Medical Care Programs has been authorized by The Council to seek a federal grant "to study the practicing physician's attitudes toward HMOs and similar types of health care delivery in his own county or region."

Succeeding issues of *Michigan Medicine* will provide detailed, pertinent information you must have about HMOs in order that you can determine the type of practice best suited to you and your patients.

Ingham doctors explore 'this thing called prepaid group practice'

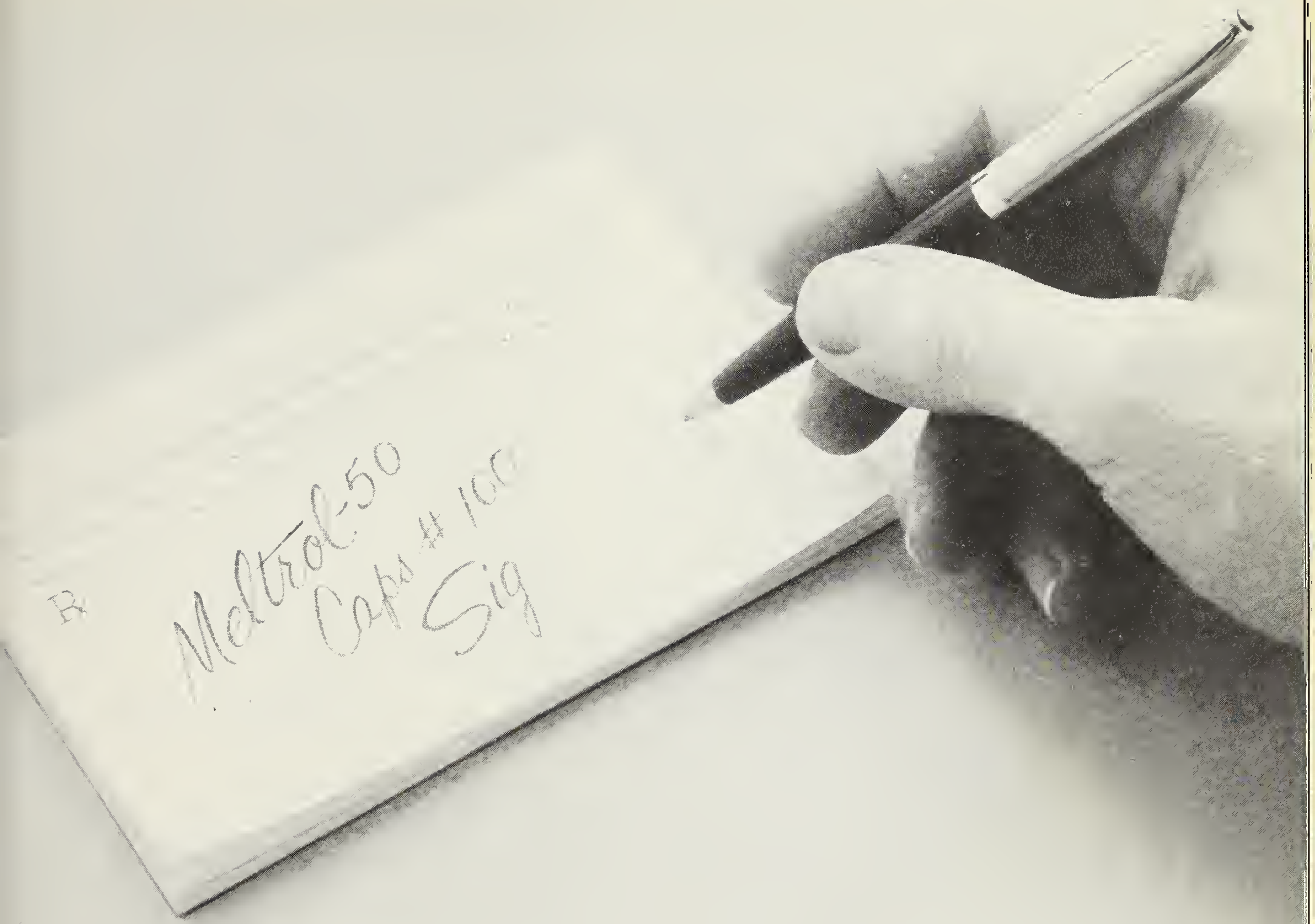
Public pressure to find new ways to finance health care is leading to more exploration of prepaid group practices, Ingham County physicians were told recently.

William Flaherty of Detroit, a Michigan Blue Cross vice president, told the doctors that in the past three years, "noise of increasing loudness" also has come from Washington for prepaid group practice as a way to lead the health profession out of its problems. He cited statistics showing less use of hospitals through prepaid programs than in traditional coverage. He also noted that the Community Health Association of Detroit, one example of a PPGP, was "a moneymaker," with a profit of approximately $830,000 on $11 million revenue.

Pressures to change the financing of health care are coming from employers who foot the entire insurance bill, and are warily eyeing rate increases, and from the employe, who is looking at the increasing premiums slicing into his wage package, said Mr. Flaherty.

Berrien doctors sponsor seminar on health care delivery

The Berrien County Medical Society was a cosponsor recently of a seminar on health care delivery systems, which presented varying views of medical care and resources. On the panel were Peter Maraveleas, president, Medical Ancillary Services, Inc.; Clinton Wilson, MD, Benton Harbor physician; Edward J. Connors, administrator, University Hospital, Ann Arbor, and Sidney Katz, MD, head of the Department of Community Medicine, Michigan State University College of Human Medicine.



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Ancillary

Boyne City finds a doctor!

The successful end to Boyne City's six-year search for a new medical doctor has delighted the citizens of that community and the Michigan Health Council.

Franz W. Jordan, MD, of Saginaw, began a family practice in Boyne in early November. He found the city and its need for a medical doctor through the Health Council's Physician Placement Service.

Boyne City was the first Michigan community to obtain a doctor when the Health Council established its free MD Placement Service in 1953 under the guidance of the MSMS and the financial assistance of the Upjohn Company. The Health Council has since placed nearly 1,100 physicians in Michigan practices.

Doctor Jordan's placement was a result of a joint effort between the health council and the Boyne Community. A citizens' committee was organized to find an "MD for BC," billboards were erected along nearby state highways, newspaper articles advertised the need for a doctor and the Chamber of Commerce assisted.

There is a particular need for family doctors like Doctor Jordan, who are interested in going to smaller, rural Michigan communities, reports John A. Doherty, executive vice president of the MHC.

The Physician Placement Service has openings, however, for over 2,000 physicians in all specialties, he says. The service can be reached at MHC headquarters, 712 Abbott St., East Lansing, Mich. 48823.

Doctor Franz Jordan at home in his new Boyne City office.

Atherosclerosis major topic of MHA Heart Days

Distinguished physicians and researchers will be speakers at the annual Heart Days Sessions of the Michigan Heart Association April 13-15 at Cobo Hall and the Ponchartrain Hotel in Detroit.

The Scientific Sessions on Friday and Saturday will be preceded by a program on stroke, all day Thursday.

Topic of the five talks and one panel discussion on Friday will be "Atherosclerosis and Its Complications." Saturday's program will concentrate on coronary artery disease.

Speakers include Charles K. Friedberg, MD, editor of *Circulation* and author of the definitive text on cardiovascular disease; William B. Kannel, MD, medical director, Framingham Heart Disease Study; Norman E. Shumway, MD, transplant surgeon at Stanford University School of Medicine, and Herbert L. Abrams, MD, chairman, Department of Radiology, Harvard Medical School.

Transgrow service for detecting gonorrhea now available

With the beginning of 1972, the Bureau of Laboratories of the Michigan Department of Public Health is making available a new service for diagnosing gonorrhea, utilizing the Transgrow medium, Maurice S. Reizen, MD, director of the department, has announced. Transgrow is used for sending specimens to a central laboratory.

Transgrow is available either through local health departments, the nearest branch of the Bureau of Laboratories, or the Division of Laboratory Services, Michigan Department of Public Health, 3500 N. Logan St., Lansing, Mich. 48914.

Interns, residents may join AMA at special rate

The AMA House of Delegates has approved a special $20 membership dues rate for all hospital interns and residents who wish to join the AMA directly or through a state society.

Interns and residents are not eligible for 1972 AMA membership dues exemption or special associate membership. For their dues payment, the interns and residents will receive the same AMA publications which are given to the regular dues-paying members.

Representing the views of Michigan physicians on the health care needs of the state was Brooker L. Masters, MD, far right, MSMS Council chairman, when he testified before the national Democratic Policy Council's Subcommittee on Health Jan. 12 in Detroit. Doctor Masters was accompanied by Donald N. Sweeny, Jr., MD, second from left, chairman, Michigan's AMA delegation. The two met with, from left, James McNeely, chairman Michigan State Democratic Party; Leonard Woodcock, president of the UAW and The Hon. Martha W. Griffiths, Detroit congresswoman. Mrs. Griffiths and Mr. Woodcock are co-chairmen of the policy council's subcommittee. **(See related article on page 81)**

New assistant in Dep't of Education aids deaf-blind children

Michigan physicians who see children with the dual impairment of deafness and blindness may refer such children to the Michigan Department of Education's new Project Assistant for Services to Deaf-Blind Children.

Mrs. Sandra G. Skubick holds the new MDE post, which became effective Aug. 30 and is funded through the Midwest Regional Center for Services to Deaf-Blind Children.

She may be reached by dialing (517) 373-3730, and will be visiting each county and intermediate school district. She also will speak at medical society meetings.

Hutzel Hospital training physicians in Xeroradiography

Hutzel Hospital has a training program to teach doctors to read Xerox prints as a new diagnostic technique. Called Xeroradiography, the new process is being promoted as better than the X-ray.

The XR provides much better detail for the detection of breast cancer, as reported in a January, 1969, *Michigan Medicine* article by John N. Wolfe, MD, chief of radiology at Hutzel, and a pioneer in the use of the XR.

The new process, which produces a dry, blue-tinted, positive print in about 90 seconds, also can be used for examining bone fractures; the larynx, cervical spine and neck; tumors, and abnormal conditions of the breast.

Doctor Swartz

Doctor Swartz optimistic after conference on aging

Older Americans can look forward to government action in their behalf over the next year as the result of the 1971 White House Conference on Aging, according to Frederick C. Swartz, MD, of Lansing, chairman of the American Medical Association Committee on Aging. He spoke to reporters at a news conference held in East Lansing by the Michigan State Medical Society at the conclusion of the White House Conference.

Doctor Swartz, a member of the MSMS Ad Hoc Committee for the White House Conference, said he is optimistic about results of the conference because of the mandate given leaders who will stay on in the federal government to carry out programs approved by the conference.

President Nixon's expression of interest and promise of additional funds for the Administration on Aging were greeted warmly by conferees, Doctor Swartz said.

"I don't think Nixon promised anything more than he thought he could possibly do," the doctor added. "He seemed to offer a well-thought-out answer to many of the problems he thinks he can help with."

Older persons should be integrated into the mainstream of medicine and treated as any other patient, Doctor Swartz told reporters.

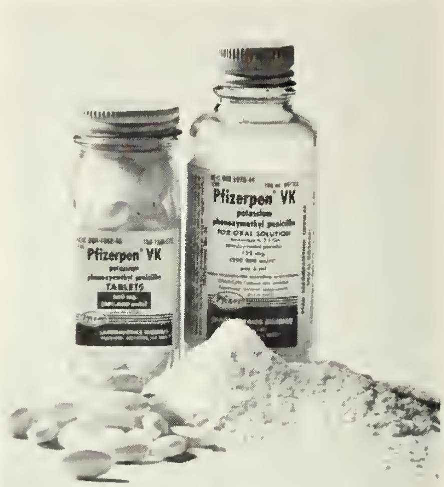
"Age is no bar to good medical or surgical treatment and today a surgeon will not ask the age of a patient but inquire about his physical condition," he said.

Doctor Swartz told reporters that not age itself but compulsory retirement, idleness, lack of motivation and segregation from other parts of society contribute most to health problems of older Americans.

There are no problems of the aging except those imposed by retirement—they are the same as those of every other age group, he said. "Age actually does nothing to the human body—it is not a matter of age, but a matter of the patient's trials and tribulations and how he overcomes them."

Ideally, he said, an individual should have satisfying employment, in the amount suited to his ability, outside interests and the same medical treatment and preventive health care as the population generally.

PFIZERPEN DOSAGE FORMS



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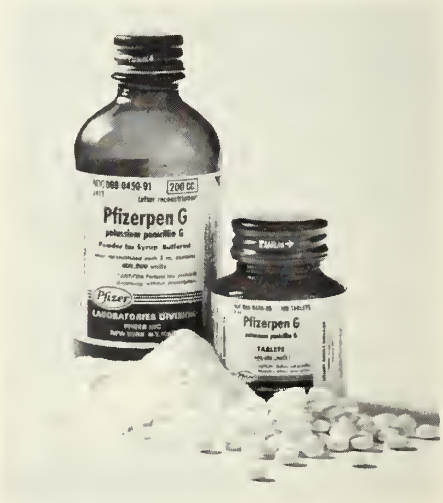
250 mg. (400,000 units)/5 cc.:
bottles of 100 cc. and 150 cc.

Pfizerpen VK Tablets (potassium phenoxymethyl penicillin)
250 mg. (400,000 units): bottles of 100.
500 mg. (800,000 units): bottles of 100.



Butterscotch-caramel-flavored Pfizerpen G Powder for Syrup (potassium penicillin G)
400,000 units/5 cc.:
bottles of 100 cc. and 200 cc.

Pfizerpen G Tablets (potassium penicillin G)
200,000 units: bottles of 100 and 500.
250,000 units: bottles of 100.
400,000 units: bottles of 100 and 1000,
and unit-dose pack of 100 (10 x 10's).
800,000 units: bottles of 100.

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When you write penicillin VK, it's for acid stability, solubility and rapid absorption. But when you write **Pfizerpen VK,** you add economy. Pfizerpen VK, more economical than the two leading brand-name penicillin VK products. G or VK. Just make sure it's Pfizerpen.

Tablets and Powder for Syrup

PFIZERPEN® VK

(POTASSIUM PHENOXYMETHYL PENICILLIN)

**G OR VK. JUST
MAKE SURE IT'S PFIZERPEN.**

Michigan Board of Education includes health interests in new goals

Various references to health are made in the recently-adopted "Common goals of Michigan Education" by the Michigan Board of Education. The goals were originally formulated by a special 21-member task force and refined after 28 public meetings across the state.

"Adoption of these goals helps to build accountability into the Michigan education system," stresses John W. Porter, state superintendent of public instruction.

The three goals deal with (1) citizenship and morality, (2) democracy and equal education, (3) student learning. Grouped under these three headings are 22 specific goals.

Among the 22 specific goals are these:

"Physical and Mental Well-Being: Michigan education must promote the acquisition of good health and safety habits and an understanding of the conditions necessary for physical and mental well-being."

"Preparation for Family Life: Michigan education must provide an atmosphere in which each individual will grow in his understanding of and responsiveness to the needs and responsibilities inherent in family life. Joint efforts must be made by school, parents, and community to bring together the human resources necessary in this endeavor."

"Education of the Exceptional Person: Michigan education must recognize and provide for the special educational needs of exceptional persons. This recognition must extend to those who are academically talented and to those who are considered physically, mentally, or emotionally handicapped. Regarding the handicapped, Michigan education must further assure that its procedures concerning the testing and evaluation of children tentatively identified as being mentally or emotionally handicapped do not unduly penalize minority or low socioeconomic status children by precipitous referral and placement into special classes. Every effort must be made to achieve the maximum progress possible for exceptional individuals by facilitating their movement into and/or out of special classes."

Interested physicians may obtain a copy of the goals booklet by writing to Michigan Department of Education, Michigan National Bank Tower, Lansing, Michigan 48902.

Grand Rapids hospitals strengthen ties with U-M, MSU med schools

Three major hospitals in Grand Rapids are undertaking an arrangement with Michigan's medical schools that gives Grand Rapids the clinical programs of a medical school.

Blodgett, Butterworth and St. Mary's hospitals officially formed the Grand Rapids Area Medical Education Center (GRAMEC) on Nov. 29 at a contract-signing ceremony chaired by the president of the new corporation, Craig Booher, MD, director of medical education at Blodgett Hospital.

Over the past four years, the three hospitals gradually have increased their cooperative educational efforts in collaboration with Michigan State University and the University of Michigan.

Other medical schools also may send students to Grand Rapids to take part in undergraduate medical programs. Similarly, the organization is open to other area hospitals and educational institutions that train health manpower.

The cooperative effort includes the training not only of medical students but also of interns and residents and eventually will include continuing education programs for community physicians.

79% of patients from out-of-state at one NY abortion clinic

The Eastern Women's Center of New York City makes the following report on its experiences with abortion during its first five months of operation, June-October:

The center had over 4,000 patients, the majority referred through Planned Parenthood, Problem Pregnancy Services, Free Clinics and Zero Population Growth agencies;

—79% of the patients were from out-of-state;

—the greatest number of patients were 19 and 20; the average age was 22.5;

—68% of the patients were single, 15% married, 12% separated and 5% divorced;

—77% of those who terminated their pregnancies had no children;

—75% of the patients had used no method of birth control.

New name for psychiatrists' organization

The Michigan Society of Psychiatry and Neurology has changed its name to the Michigan Psychiatric Society, according to Bruce L. Danto, MD, of the Michigan Task Force of the society.

New from Lederle
the Tri-Phasic Hematinic

Specifically formulated with
vitamins and minerals important
in the treatment of anemia

PHASE 1

Enhanced Absorption

Each tablet provides 115 mg elemental iron as the highly absorbable ferrous fumarate *plus* 600 mg of Vitamin C.

PHASE 2

Erythrocyte Formation

Each tablet provides Vitamin B_{12} (25 mcg) and Folic Acid (1 mg) to replace deficiencies.

PHASE 3

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Each tablet provides Vitamin E, which may be involved in lessening red blood cell fragility.

For common anemias
as well as problem ones

TriHEMIC™ 600
HEMATINIC TABLETS
Tri-Phasic Hematinic with 600 mg Vitamin C PLUS Vitamin E

Each tablet contains:

Vitamin C (Ascorbic Acid)	600 mg.
Vitamin B_{12} (Cobalamin Concentrate, N.F.)	25 mcg.
Intrinsic Factor Concentrate	75 mg.
Folic Acid	1 mg.
Vitamin E (*d*-Alpha Tocopheryl Acid Succinate)	30 Int. Units
Elemental Iron (as present in 350 mg. of Ferrous Fumarate)	115 mg.
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Dosage: One Tablet Daily.
Available in Bottles of 30 Tablets.
On Your Prescription Only.

Precautions: Some patients affected with pernicious anemia may not respond to orally administered Vitamin B_{12} with intrinsic factor concentrate and there is no known way to predict which patients will respond or which patients may cease to respond. Periodic examinations and laboratory studies of pernicious anemia patients are essential and recommended. If any symptoms of intolerance occur, discontinue drug temporarily or permanently. Folic acid, especially in doses above 1 mg. daily, may obscure pernicious anemia, in that hematologic remission may occur while neurological manifestations remain progressive.

Adverse Reactions: G.I.: nausea, vomiting, diarrhea, abdominal pain. Skin rashes may occur. Such reactions may necessitate temporary or permanent changes in dosage or usage. Allergic sensitization has been reported following both oral and parenteral administration of folic acid.

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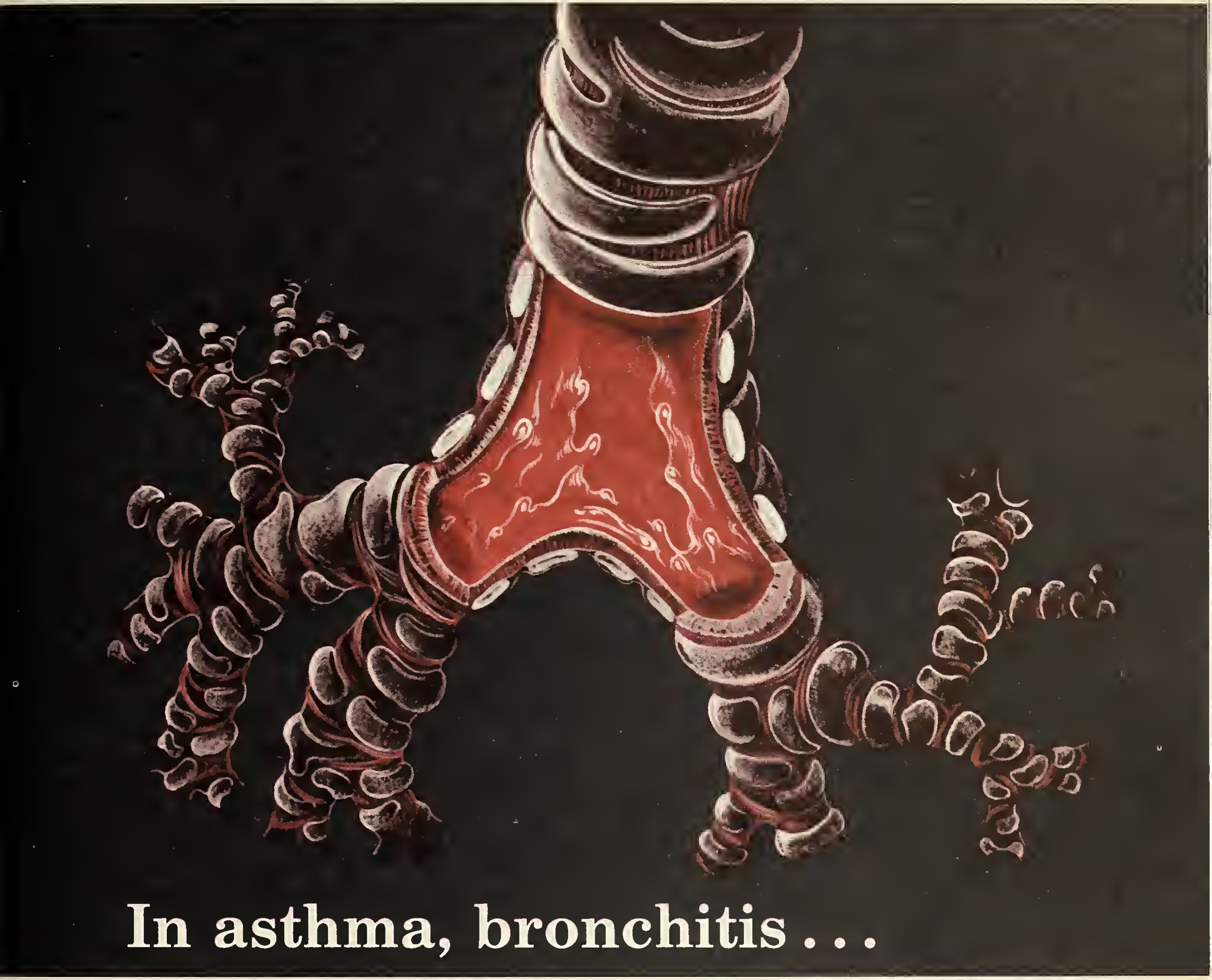

"Many physicians use iodides intravenously when they suspect that the main reason for airway obstruction is sticky mucus but oral iodides are more likely to exert an expectorant action."[1]

"For the viscid sputum, potassium iodide (... preferable as enteric coated tablets) may be best."[2]

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"The productive cough serves the necessary purpose of removing excess mucus from the bronchial tree."[3]

". . . there is clear evidence that the loosening of the bronchial mucus blanket must begin from within the underlying mucus glands where it is anchored and not from the surface. Complications of iodides are too occasional to avoid the use of this valuable medication."[3]

Rx Information:

INDICATIONS: The primary indication for Iodo-Niacin is in any clinical condition where iodide therapy is desired. All of the usual indications for the iodides apply to Iodo-Niacin and include:

RESPIRATORY DISEASE: The use of Iodo-Niacin is indicated whenever an expectorant action is desired to increase the flow of bronchial secretion and thin out tenacious mucus as seen in bronchial asthma, and other chronic pulmonary disease. Iodo-Niacin has also proven of value in sinusitis, bronchitis, bronchiectasis, and other chronic and acute respiratory diseases where the expectorant action of iodide is desired.

THYROID DISEASE: Iodo-Niacin is indicated in any thyroid disorder due to iodine deficiency, such as endemic goiter or hypoplastic goiter, and where hypothyroidism is secondary to iodine deficiency. Iodo-Niacin will suppress mild hyperthyroidism completely, and partially suppress more severe hyperthyroid states. Iodo-Niacin is also of value in suppressing the symptoms of hyperthyroidism and decreasing the size and vascularity of the thyroid gland prior to thyroidectomy

ARTERIOSCLEROSIS: Iodides have been reported as relieving some of the symptoms associated with arteriosclerosis. The mechanism of action is unknown, but the effects are documented.

OPHTHALMOLOGY: Iodo-Niacin has been reported to be of value in retinal and vitreous hemorrhages. The mechanism of action is unknown, but absorption of the hemorrhagic areas has been observed following use of this drug. It is also reported to be of value in reducing or removing vitreous floaters.

SIDE EFFECTS: Serious adverse side effects from the use of Iodo-Niacin are rare. Mild symptoms of iodism such as metallic taste, skin rash, mucous membrane ulceration, salivary gland swelling, and gastric distress have occurred occasionally. These generally subside promptly when the drug is discontinued. Pulmonary tuberculosis is considered a contraindication to the use of iodides by some authorities, and the drug should be used with caution in such cases. Rare cases of goiter with hypothyroidism have been reported in adults who had taken iodides over a prolonged period of time, and in newborn infants whose mothers had taken iodides for prolonged periods. The signs and symptoms regressed spontaneously after iodides were discontinued. The causal relationship and exact mechanism of action of iodides in this phenomenon are unknown. Appropriate precautions should be followed in pregnancy and in individuals receiving Iodo-Niacin for prolonged periods.

DOSAGE: The oral dose for adults is two tablets after meals taken with a glass of water. For children over eight years, one tablet after meals with water. The dosage should be individualized according to the needs of the patient on long-term therapy.

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References: 1. Itkin, I. H., Am. Fam. Phys. 4:83, 1971. 2. Feinberg, S. M., Consultant Sept., 1971, pg. 32. 3. Bookman, R., Ann. Allerg. 29:367, 1971.

Presidents-elect and executive secretaries of county medical societies were welcomed by MSMS Director Warren F. Tryloff to a workshop recently at MSMS headquarters in East Lansing.

The presidents-elect were introduced to the MSMS staff and spent the afternoon discussing MSMS procedures and projects and mutual problems.

Challenges facing county medical societies were expressed by Kenneth J. May, MD, new president of the Kalamazoo Academy of Medicine, at the opening session of the workshop.

Presidents-elect and executive secretaries of the larger county medical societies held their own session in the MSMS board room, led by Kenneth H. Johnson, MD, standing, MSMS secretary.

County Presidents-elect were taken on a walking tour of the MSMS building by Herbert Mehler, left, MSMS chief, Research and Analysis, Governmental Medical Care Programs. Among the future presidents clearly visible are, from left, Richard H. Gascoigne, MD, Lenawee; William S. Bowden, MD, St. Clair; Anthony Bartolo, MD, Monroe; John E. Morovitz, MD, Shiawassee, and Anthony M. Abruzzo, MD, Lapeer, foreground.

County presidents-elect gain new insight at MSMS workshop

County in the spotlight

Trying to recruit new doctors to your area? Take some hints from Jackson

By Judith Marr
Managing Editor

Michigan's leading county society in terms of attracting new doctors to its area is undoubtedly, Jackson.

The community's doctor-business Committee for Medical Opportunities, founded by the Jackson County Medical Society in summer, 1968, has brought 12 new physicians to Jackson. Among them are internists, family physicians, surgeons, an allergist, an oncologist and a pediatrician.

And there is much in the Jackson county society's recruitment technique that can be of help to other county societies. Nathan Munro, MD, chairman of the committee, describes some of the methods:

First, the Jackson society enlisted the services of a professional public relations man from a large local firm in planning their campaign.

His help resulted in the preparation of a large packet of promotional materials about Jackson, its health facilities and the physicians already there. The packet is mailed to interesting physicians and was distributed to all U.S. Armed Forces base hospitals to attract military doctors when their service was over.

A major factor in the Jackson doctor's recruitment of new physicians has been their enlistment of community support. The committee itself is composed of varied community leaders including the public relations men, who donate their time and efforts.

The community support has also been monetary. In the summer of '68, Doctor Munro raised over $11,000 to support the recruitment efforts. Half came from community foundations and industry, the other half from the county medical society.

The Jackson committee has worked closely with the physician placement service of the Michigan Health Council, which introduced the community to nearly every new doctor brought to Jackson by the committee.

"So many communities have the idea their doctors don't want any more physicians," observes John A. Doherty, executive vice president, Michigan Health Council. "This isn't true. And in Jackson's case, the leadership for more doctors has come from the county medical society."

Mr. Doherty has high praise for the Jackson efforts.

"The Jackson society has done a superior job of developing materials. On the basis of obtaining the cooperation of many people in the community, it has done the best job in the state," Mr. Doherty says.

The Health Council has mailed the promotional packet to all the physicians on its mailing list, and also to other Michigan towns. Many have copied the idea after seeing the materials inside.

When the Jackson committee first learns of a doctor's interest in Jackson, it sends him a week's copies of the local newspaper, "to give the doctor some insight into Jackson," says Robert Swartley, JCMS executive director.

The Jackson society invites the doctor to town. Mr. Swartley and community leaders drive the doctor and family together on a tour of Jackson's highlights.

The county society assists the new physician, once he's agreed to come to Jackson, to find housing, office space and personnel.

A major service of the society to the new doctor is to list his telephone a month ahead of his arrival and to begin to arrange appointments. Some newly-settled Jackson doctors have walked into a full month of appointments their first day of practice.

An important side-effect of the committee's activities, noted co-chairman Donald Huldin in 1969, is that they stimulate Jackson physicians toward a renewed interest in encouraging and seeking out new doctors.

Their search is continuing.

"We hope to work directly with the family practice residency programs around the state, as our need is greatest now for family doctors," says Doctor Munro. The committee also is looking for good results from the local hospital's clerkship program with third and fourth-year medical students from MSU.

Things to keep in mind while recruiting new doctors

Is your county medical society trying to attract new physicians to its area? Perhaps these suggestions from Doctor Munro and Mr. Swartley will help:

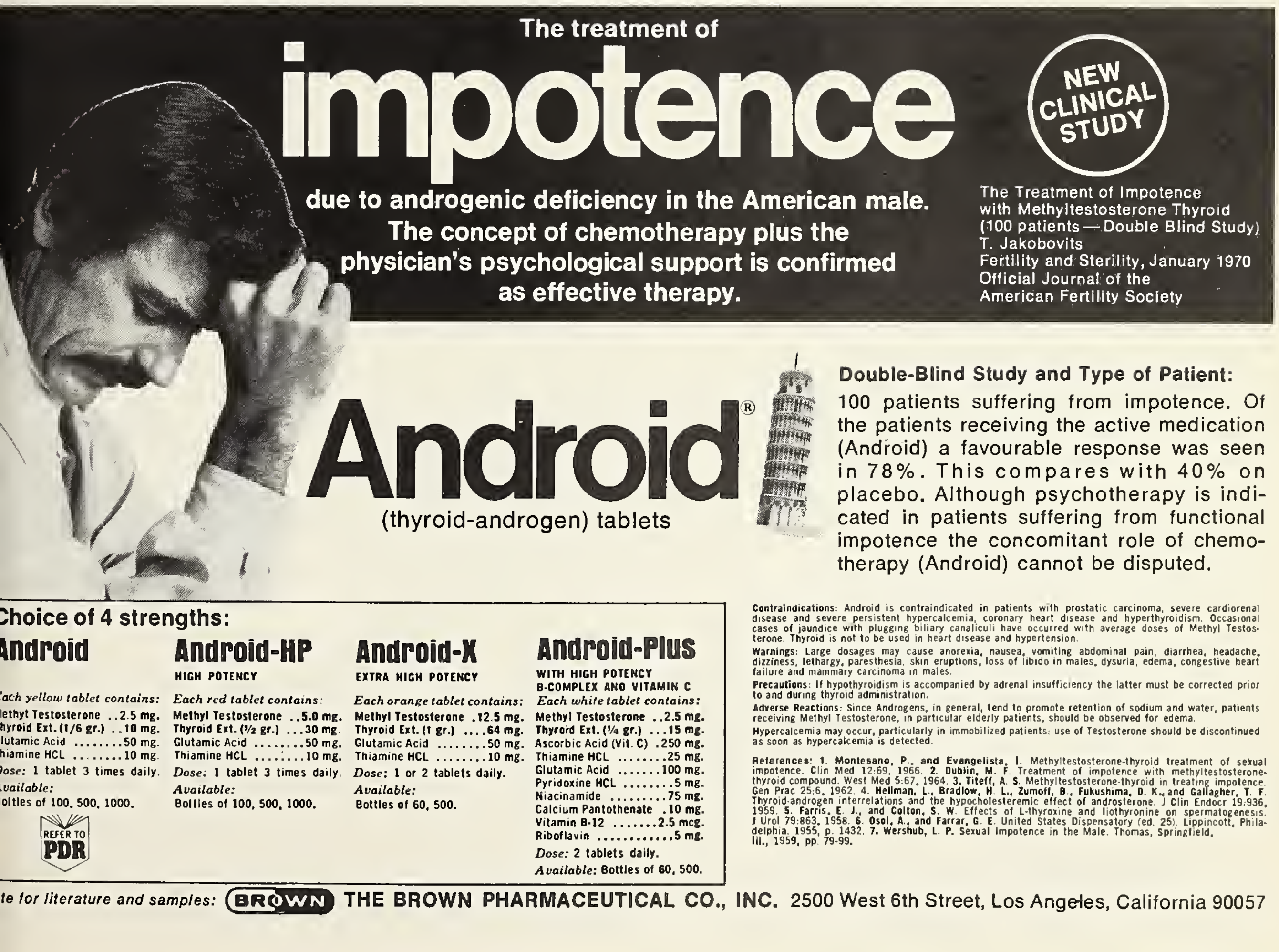
1. Maintain congeniality while selling the prospect on the advantages of your area. Let the physician, and his wife, also, know that they are sincerely wanted.

The Jackson society:

2. Initiates contact with the physician with a telephone call by a recruitment committee member in the same specialty.

3. Takes the prospect to dinner with local physicians and community business leaders and on a tour of the area including private physician's offices and hospitals, assists him in locating office space, employees, housing and bank loans, if necessary.

"I personally believe convincing the prospective physician of the need of his services to the entire community is important," says Mr. Swartley. "Showing the physician's wife the pleasant living accommodations available and the schools also helps sell the prospect on our community."



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T. Jakobovits
Fertility and Sterility, January 1970
Official Journal of the American Fertility Society

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ethyt Testosterone ..2.5 mg. hyroid Ext. (1/6 gr.) ..10 mg. lutamic Acid ....50 mg. hiamine HCL ....10 mg.	Methyl Testosterone ..5.0 mg. Thyroid Ext. (½ gr.) ...30 mg. Glutamic Acid ....50 mg. Thiamine HCL ....10 mg.	Methyl Testosterone .12.5 mg. Thyroid Ext. (1 gr.) ....64 mg. Glutamic Acid ....50 mg. Thiamine HCL ....10 mg.	Methyl Testosterone ..2.5 mg. Thyroid Ext. (¼ gr.) ...15 mg. Ascorbic Acid (Vit. C) .250 mg. Thiamine HCL ....25 mg. Glutamic Acid ....100 mg. Pyridoxine HCL ....5 mg. Niacinamide ....75 mg. Calcium Pantothenate .10 mg. Vitamin B-12 ....2.5 mcg. Riboflavin ....5 mg.
ose: 1 tablet 3 times daily.	*Dose:* 1 tablet 3 times daily.	*Dose:* 1 or 2 tablets daily.	*Dose:* 2 tablets daily.
vailable: oltles of 100, 500, 1000.	*Available:* Bollles of 100, 500, 1000.	*Available:* Bottles of 60, 500.	*Available:* Bottles of 60, 500.

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Contraindications: Android is contraindicated in patients with prostatic carcinoma, severe cardiorenal disease and severe persistent hypercalcemia, coronary heart disease and hyperthyroidism. Occasional cases of jaundice with plugging biliary canaliculi have occurred with average doses of Methyl Testosterone. Thyroid is not to be used in heart disease and hypertension.

Warnings: Large dosages may cause anorexia, nausea, vomiting abdominal pain, diarrhea, headache, dizziness, lethargy, paresthesia, skin eruptions, loss of libido in males, dysuria, edema, congestive heart failure and mammary carcinoma in males.

Precautions: If hypothyroidism is accompanied by adrenal insufficiency the latter must be corrected prior to and during thyroid administration.

Adverse Reactions: Since Androgens, in general, tend to promote retention of sodium and water, patients receiving Methyl Testosterone, in particular elderly patients, should be observed for edema.

Hypercalcemia may occur, particularly in immobilized patients; use of Testosterone should be discontinued as soon as hypercalcemia is detected.

References: 1. Montesano, P., and Evangelista, I. Methyltestosterone-thyroid treatment of sexual impotence. Clin Med 12:69, 1966. **2. Dublin, M. F.** Treatment of impotence with methyltestosterone-thyroid compound. West Med 5:67, 1964. **3. Titeff, A. S.** Methyltestosterone-thyroid in treating impotence. Gen Prac 25:6, 1962. 4. **Hellman, L., Bradlow, H. L., Zumoff, B., Fukushima, D. K., and Gallagher, T. F.** Thyroid-androgen interrelations and the hypocholesteremic effect of androsterone. J Clin Endocr 19:936, 1959. **5. Farris, E. J., and Colton, S. W.** Effects of L-thyroxine and liothyronine on spermatogenesis. J Urol 79:863, 1958. **6. Osol, A., and Farrar, G. E.** United States Dispensatory (ed. 25). Lippincott, Philadelphia, 1955, p. 1432. **7. Wershub, L. P.** Sexual Impotence in the Male. Thomas, Springfield, Ill., 1959, pp. 79-99.

te for literature and samples: BROWN THE BROWN PHARMACEUTICAL CO., INC. 2500 West 6th Street, Los Angeles, California 90057

County scenes

Shiawassee doctors aid youth program

Members of the Shiawassee County Medical Society are assisting in the efforts of Spearhead Owosso, a nonprofit group organized last fall to give young people a place to go and something to do. The county society members accept young persons referred to them by the center for aid in drug addiction, alcoholism, venereal disease and pregnancy.

Van Buren doctors sponsor diphtheria clinic

The Van Buren County Medical Society cosponsored a diphtheria immunization clinic in December in the Covert Community Center, after a case of diphtheria was reported in the South Haven area.

'Talking Lady' gift of Genesee MDs

A new "talking lady" exhibit has been provided for the Flint Health Institute through a $25,000 donation by the Genesee County Medical Society. The "talking lady" is a clear, life-size plexiglass human form, whose lifelike internal organs light up one by one as the Talking Lady describes how they work.

Oceana doctors cosponsor glaucoma clinic

A glaucoma screening clinic was cosponsored by the Oceana County Medical Society and the District No. 5 Health Department in Hart in mid-December. The testing was done by three local physicians.

County societies with wage, price questions to consult regional offices

County medical society officials seeking to raise wages or prices for such items as blood bank charges and society-operated telephone exchanges are advised to contact regional headquarters of the Office of Emergency Preparedness during the duration of the federally-imposed wage and price controls.

Michigan is included in the Chicago region, with its office at 33 East Congress Parkway, Room 204A, Chicago 60601. The telephone is (313) 591-5141.

Doctors should inform emergency room patients of full costs

The patient has the right to know just what he'll have to pay for his treatment before he leaves the emergency room, says an Oakland County Medical Society committee.

"It is the responsibility of the physician in the emergency room to let the patient know," declares Joel I. Hamburger, MD, Southfield, chairman of the OCMS Mediation Committee, in that committee's annual report. "And where possible, this should be done in advance of the performance of the service."

"Even in the emergency room the patient's freedom of choice to seek medical attention elsewhere should be preserved," says Doctor Hamburger. "Since most emergency room patients are not actually emergencies, advance agreement upon fees seems not only possible, but proper."

The responsibility of fully informing the patient lies with the emergency room physician, says Doctor Hamburger, "simply because no one else in an emergency room setting can be expected to do the job in a tactful and effective fashion."

Doctor Hamburger's recommendations follow his committee's review of 22 complaints from July, 1970, to July, 1971. A sizeable proportion of the complaints related to fees for emergency room care.

Unexpected substantial bills (even though justifiable in terms of the services rendered) were the bases upon which many complaints were made. They were largely the result of lack of communication, reports Doctor Hamburger.

A common complaint was that the patient did not realize he had seen a specialist, assuming "the doctor worked for the hospital."

"If these complaints, with their detrimental effect upon the physician's public image, are to be minimized, a more effective effort must be made to inform the patient of the magnitude of his financial responsibility," urges Doctor Hamburger.

Calhoun doctors recruit youngsters, improve own knowledge

Calhoun County physicians have been active in two important areas recently. Representatives of the county medical society met with local high school students during a "Night with the Professionals" at Kellogg Community College, Battle Creek. Counseling sessions to encourage the students to enter health careers were held as part of the observance of Community Health Week.

Doctor Smathers installed in January as Wayne County president

Leaders of the Wayne County Medical Society, gathered at the installation of new president Homer M. Smathers, MD, center, include Robert K. Whiteley, MD, left, immediate past president, and Sidney Chapin, MD, president-elect, who will become president in 1973.

Homer M. Smathers, MD, is the new president of the Wayne County Medical Society, installed at the January regular meeting when Sidney Chapin, MD, was announced as the new president-elect after a three-way contest.

Robert K. Whiteley, MD, was thanked for his 18 months of outstanding service. He served an extra six months as president after a bylaws change to the calendar year.

The WCMS elections committee also announced that Ned I. Chalat, MD, had been returned as secretary; and James D. Fryfogle, MD, chosen as a new member of the board of trustees. WCMS also elected officers for three sections and four geographic positions, along with delegates and alternates to the MSMS House.

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Stuart M. Gould, Jr., M.D.
Sydney Joseph, M.D.
Hubert Miller, M.D.
Jacob J. Miller, M.D.
Rudolf E. Nobel, M.D.
Gerard M. Schmit, M.D.
Joseph J. Tiziani, M.D.
Prehlad S. Vachher, M.D.
Richard D. Watkins, M.D.
Robert M. Zimmerman, M.D.

Some county societies have drug programs; but they'd like more

By Judith Marr
Managing Editor

Twenty-one of the 55 MSMS component county societies report that they work cooperatively with local schools in lectures and counseling on drug abuse.

Fifteen of the component societies work cooperatively with the police in lectures and counseling; 15 county societies urge their hospitals to provide facilities for the diagnosis, treatment and rehabilitation of drug-dependent patients, and 14 have active committees studying local drug abuse problems.

Ten county societies report active speakers bureaus to serve schools, churches and community clubs, and 10 have adopted action programs to alleviate drug abuse conditions.

But 13 of the county societies do not have trained speakers and 23 would like help from MSMS to develop continuing medical education programs for doctors about drug diagnosis, treatment and rehabilitation. Sixteen would like help from MSMS to bring community agencies together to form a community-wide approach to education and treatment.

These tabulations are the result of the questionnaire sent by the MSMS Committee on Alcohol and Drug Dependence to MSMS's 55 component societies on July 30. Forty of the societies responded.

Wayne County reported the most ambitious program to combat the drug problem.

Its society has sponsored two workshops for members, to discover the number of physicians who would like to learn more about how to fight drug abuse and what they would like to know. The society has held two workshops with hospitals, planned meetings with law enforcement agencies, met with the Detroit Bar Association and school representatives, and worked also with the Detroit Health Department, Detroit Medical Association, Greater Detroit Area Hospital Association, Wayne County Osteopathic Association, and Metropolitan Detroit Pharmaceutical Association, the state narcotic bureau and the Food and Drug Administration.

Wayne County currently is encouraging 20 hospitals to establish drug treatment centers and is cooperating with the hospitals to provide emergency care for drug addicts.

In other areas of the state, the Jackson County doctors were instrumental in organizing the Jackson Area Drug Abuse Council three years ago; and Kent County doctors are actively involved in Project Rehab, a local organization combating drug abuse. The Kent physicians introduced a resolution for a moratorium on amphetamines in the 1971 MSMS House of Delegates.

Six or seven Lenawee County physicians spoke with representatives of the county sheriff's office before school assemblies; the Midland County Medical Society has an ad hoc committee on drug abuse. Muskegon county has organized nightly rotations of MDs and DOs to be "on call" for acute drug problems and has held educational meetings.

County medical society members throughout the state have worked with church and youth groups, mental health boards, county-wide mental health advisory committees and concerned citizens groups, as well as on an individual basis.

County medical society evaluations of the local drug abuse problems range from the Houghton-Baraga-Keweenaw assay that "drugs have not been a problem in this area until recently," and Oceana County's observation that the local problem is "very minor, mostly from outsiders"; to Muskegon county's estimate that the problem is "increasing and very serious," and Lenawee county's belief that the problem is "increasing and getting into junior high school."

Detroit doctors fighting for ecology

Dynamic Detroit-area physicians and scientists are gathering under a new corporation to provide consulting and laboratory services to fight problems of air and water pollution, waste disposal, quality control of drugs, foods and beverages and detection of contaminants.

"We all want to become involved. There's an awful lot of talent in this area and we might as well use it," says Edwin M. Knights, Jr., MD, president of the new Life Science, Inc. Doctor Knights is director of laboratories at Providence Hospital in Southfield.

Each member of the corporation is a recognized authority in his particular field and is giving his time to help special groups to correct environmental problems in the area.

The group plans to add specialists in all areas of environmental problems. It is headquartered at 794 N. Woodward, Birmingham, in the Northland-Oakland Medical Laboratories.

Flint, G. R. doctors continuing to serve in Fayette, Miss.

Physicians from Flint and Grand Rapids are continuing to provide free medical care in Fayette, Miss., through a program begun in June, 1970, by E. Marshall Goldberg, MD, director of medical education at Hurley Hospital, Flint.

But the doctors now are going to Fayette on their own, during vacations, since their original program of assistance was discontinued at the request of the administrative board of the privately-run Jefferson County Hospital in Fayette.

During November, three Flint physicians, Roy Diggs, MD, Anna Barg, MD, and Ron Chen, MD, made the trip to Fayette, remaining for one week each. Visits by the Michigan doctors will continue on a sporadic basis.

Between June, 1970, and September, 1971, 130 Michigan physicians in three-man teams from Hurley Hospital and Butterworth Hospital, Grand Rapids, spent two weeks each working under the supervision of Charles Humphrey, MD, director of the Medgar Evers Health Center in Fayette.

The doctors enabled the center to provide free or low-cost medical care to surrounding Jefferson County's low-income population.

Some 6,000 patients were treated during the first year from a total county population of less than 10,000. Most are Negro and many had never before received modern medical treatment.

The Michigan doctors also were attached to the Jefferson County Hospital, publicly-owned, but privately operated, in a teaching relationship between the Michigan institutions and the Fayette-based hospital. The Michigan doctors provided the county's first 24-hour emergency medical coverage.

It was Doctor Goldberg's desire, as reported in a *Michigan Medicine* article in September, 1970, to train his house staff in rural medicine, to show Michigan physicians what poverty and poor delivery of health services are like in certain parts of the country, and to expose them to the problems of integration in the deep South. Doctor Goldberg saw Fayette as most in need of his fellow physicians' help.

Though the official program has been discontinued, Doctor Goldberg is continuing his association with the center.

He is a new member of the board of the Medgar Evers Fund, which supports the center in Fayette. As the only physician on the board, he joins such distinguished directors as Leonard Woodcock, Theodore Sorenson, Ramsey Clark, Carl B. Stokes, Charles Evers and entertainers Sammy Davis Jr., and Shirley MacLaine.

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Michigan's delegation to the AMA Clinical Convention

DR ROTH
DR WALKER

The AMA delegates laughed approval when a restraining jacket was presented by the Michigan Delegation Chairman Donald N. Sweeny, Jr., MD, Detroit, to the Ohio delegation for Buckeye Coach Woody Hayes. Doctor Sweeny indicated that the "Michigan delegates would certainly be less than good neighbors if we did not try to relieve the problems which faced the Ohio doctors on a recent Saturday afternoon on the gridiron of the University of Michigan" when Coach Hayes ranted and raved over some penalties. AMA Vice Speaker Walker, at the upper podium, enjoyed the break in the serious discussions.

Herbert A. Raskin, MD, Detroit, left, chairman of the AMA Committee on Alcoholism and Drug Dependence, held a news conference during the AMA meeting with Jerome H. Jaffee, MD, director of the national Special Action Office for Drug Abuse Prevention.

Demonstrations in the treatment of fractures attracted much attention at the AMA convention in New Orleans. Franklin Wade, MD, Flint, not shown in this demonstration team, participated and was a member of the organizing committee for the project.

MDPAC Chairman Louis R. Zako, MD, Allen Park, marched across the platform in New Orleans to place the Michigan flag on the stage at the 10th anniversary banquet for AMPAC. Vice President Agnew was the featured speaker. Michigan delegates and wives occupied four tables at the banquet, up close under the speaker's table.

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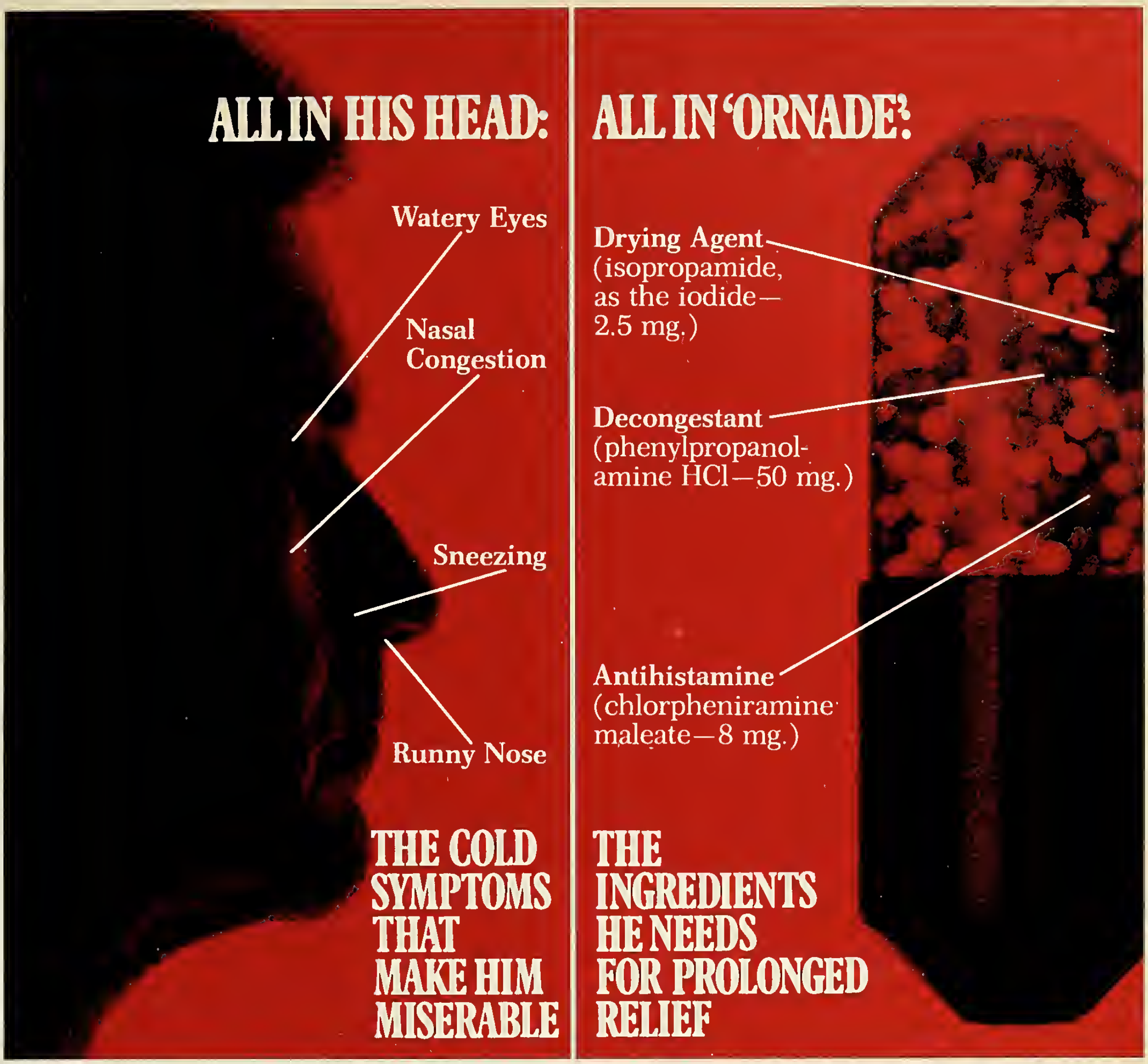
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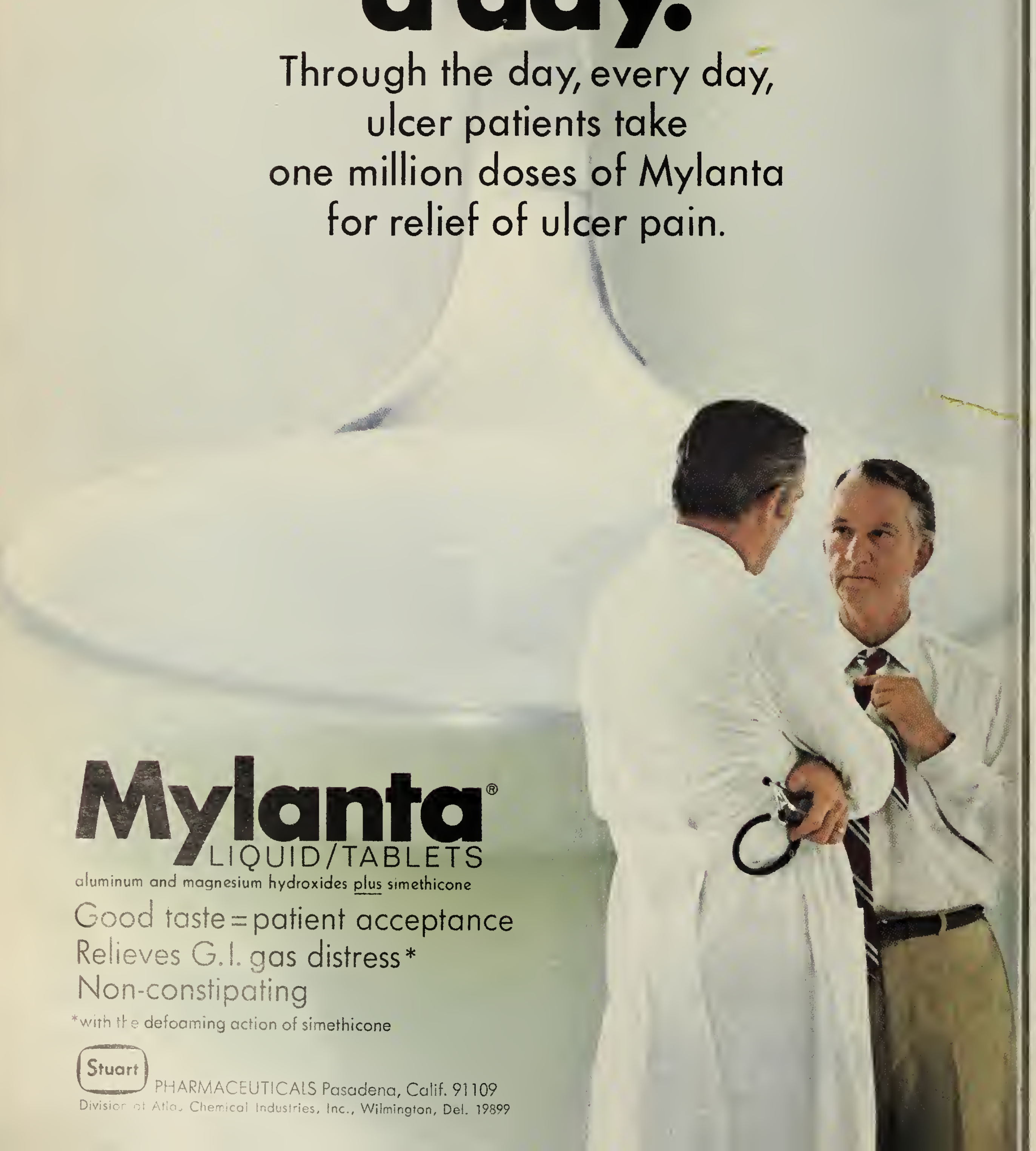

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PR notebook

Start of new year provides PR opportunities for county societies

By Herbert A. Auer, Manager
MSMS Department of Communications

Every component county medical society must constantly work to open and deepen good channels of communications with the press, radio and television.

The society committee on public relations should be charged to find out what help the media need to report and interpret the medical profession. The committee also should know what the officers and working medical committees expect in the way of news coverage, editorial support.

The MSMS House of Delegates in 1971 adopted a resolution urging component societies and physicians to cooperate with the media. The delegates observed that "an out-of-date" code of ethics has hindered the profession from being seen and heard."

The resolution states that "MSMS encourage all physicians in the state to contact the local outlets of the various communications media and make arrangements to use these media for the advancement of information on the present system of delivery of medical services, its cost and efficiency, as well as the progress medicine has made in the past several decades in promoting and improving the health care standards prevalent today." The resolution further states, "These matters to be accomplished with the consent of the local medical society and in accord with its local guidelines on the use of the media. Original and innovative ideas in carrying out this resolution are encouraged from all individual physicians, component medical societies, and public relations committees."

Each year provides new opportunities for the county society and public relations chairman to call upon as many media leaders as possible. A letter to the editor or station managers would be appropriate seeking a conference.

In approaching a newspaper, for example, introduce yourself to the editor, the managing editor, or the city editor. Obviously, you more likely can visit with the editor-in-chief in the smaller towns than the larger ones. Here is an excellent opportunity to seek advice. The editor, or the reporter, can give you some solid suggestions. And he will have a keener interest in your group and its efforts, if he has helped develop some workable procedures.

The editor will introduce you to the reporter assigned to cover such groups as yours or such activities as you have planned. Reporters generally have "news beats," such as the city hall, schools, business, etc. You should make every effort to build a business-like friendship with that reporter. Keep him posted on your activities. Tip him off, too, on other stories; he'll appreciate your interest.

Your stories about local people and local efforts are not likely to be tossed aside, but do not protest if your pet articles are cut. News releases are seldom printed just as they are turned in. It helps to find out how the media would like news releases prepared. Keep carbon copies of material that is submitted and compare them with the actual article.

Develop the habit of telling what will be happening, rather than reporting old events. Look ahead.

Newspapers have far more news, features and photos every day than they can possibly print, so medical news must compete with government, sports, etc.

For a quick understanding about what is news, here's a broad, simple definition: "News is anything and everything of interest to the public." And generally the news stories you will seek or the feature stories you want to get into print will connect if they are about something in the public interest. Some insights into newspaper operation will be valuable to you:

1. Newspapers have deadlines, which you must respect.
2. News is news today only, not tomorrow.
3. Newspapers generally are shorthanded; your help will be sincerely appreciated
4. Newspapers are always looking for human-interest happenings and photos, so look for the unusual and for chuckles.

Starting with this issue, MICHIGAN MEDICINE begins a new series of articles about public relations for Michigan physicians. The articles are designed to be torn out and saved as a reference guide.

In memoriam

Ralph M. Burke, MD
Grosse Pointe

Ralph Martin Burke, MD, Detroit-area surgeon and proctologist, died Dec. 12 at the age of 64. He was affiliated with Providence, Jennings, St. John and Bon Secours hospitals in Detroit.

Doctor Burke was a former chief of the Providence Hospital medical staff and had served as chairman of the Committee on Education of the American Proctologic Society.

Earl I. Carr, MD
Lansing

Earl I. Carr, MD, Lansing, a much-honored and distinguished physician for his work in cancer control and as president of the Michigan Foundation for Medical and Health Education, died Dec. 24, 1971, at the age of 85.

Doctor Carr had been a member of MSMS since 1914. He served as MSMS first vice president in 1927 and as liaison chairman with the University of Michigan president from 1944-53. He was a past-president of the Ingham County Medical Society.

He was chairman, trustee and president of the founding committee of the Michigan Foundation. He was trustee of the Michigan Health Council, member of the board of directors of Michigan Medical Service 17 years and on the Blue Shield finance, building and executive committees, as well as chairman of the medical advisory board.

In 1951, Doctor Carr received the first Tiffany Medal in Michigan of the American Cancer Society. He was awarded a service citation from the ACS in 1961. He served on the Michigan board of directors of the American Society for the Control of Cancer, and on its executive committee.

Doctor Carr was chief consulting surgeon of the Michigan Department of Public Health, and chief surgeon of Michigan penal institutions from 1921-26. He was on the Michigan executive committee and Committee on Trauma of the American College of Surgeons and past regent, chairman of the board and vice president of the International College of Surgeons.

Edwin F. Dittmer, MD
Grosse Pointe Park

Edwin F. Dittmer, MD, a Detroit obstetrician-gynecologist, died Nov. 28 at the age of 62.

Doctor Dittmer was on the staffs of St. John, Deaconess and Cottage hospitals in Detroit. He was a graduate of Wayne State University School of Medicine and was past treasurer of the WSU Medical Alumni Association and a former member of the WSU Board of Governors.

Doctor Dittmer was a fellow of the American College of Obstetricians and Gynecologists and was a member of the AMA Committee on Maternal and Perinatal Health. He was a member of the board of directors of Valparaiso University and a member of the MacKenzie Honor Society of Wayne State University.

Ellis R. Green, MD
Livonia

Ellis R. Green, MD, Livonia physician for 58 years, died Nov. 27 at the age of 82.

Doctor Green was a graduate of the Detroit College of Medicine and was a life member of MSMS. He was honored in 1962 by the Wayne State Alumni Association when he was presented with a certificate in honor of his 50 years of service.

Edwin S. Hoffman, MD
Detroit

Edwin Sanford Hoffman, MD, retired Grace Hospital staff physician, died Dec. 28 at the age of 66.

Doctor Hoffman was an instructor in gynecology at Wayne State University school of medicine and an assistant professor in the WSU graduate school. He was a graduate of the University of Michigan Medical School.

Doctor Hoffman was a fellow of the American College, Central Association and Michigan Society of Obstetricians and Gynecologists.

William C. Hubbard, MD
Flint

William C. Hubbard, MD, Flint ophthalmologist, died Nov. 24 at the age of 40.

Doctor Hubbard, a graduate of the University of Michigan Medical School, was affiliated with Genesee Memorial, McLaren General, Hurley and St. Joseph hospitals in Flint. He was a member of the American Academy of Ophthalmology and Otolaryngology.

Herbert K. Kent, MD
Lansing

A life member of the Ingham, Michigan State and American medical associations, Herbert K. Kent, MD, Lansing, died Nov. 4 at the age of 77.

Doctor Kent was a graduate of Loyola University medical school and practiced for a short while in Oregon and North Dakota. He established a practice in Lansing in 1932 and was on the staffs of E. W. Sparrow and Ingham Medical hospitals. He retired in 1968.

David Kliger, MD
Detroit

Detroit pediatric allergist David Kliger, MD, died Dec. 13 at the age of 69.

A graduate of Tufts College of Medicine, Doctor Kliger was employed by the state as Wayne County medical administrator for crippled and afflicted children. He was on the staffs of Children's, Mt. Carmel-Mercy and Sinai hospitals in Detroit.

Doctor Kliger was a diplomat of the American Board of Allergists and Immunologists and the American Association for Clinical Immunology and Allergy. He was a member of the Detroit Pediatric Society, the Michigan Allergy Society and was an associate fellow with the American College of Allergy.

Richard S. Knox, MD
Royal Oak

Richard S. Knox, MD, the first psychiatric consultant to the Wayne County Jail, died Dec. 27 at the age of 48.

Doctor Knox was a graduate of the University of Manitoba School of Medicine and maintained a private practice in Royal Oak.

He also served as director of the adolescent department of Lafayette Clinic from 1959 to 1961 and was consultant to the Sarah Fisher Home and the Northwest Child Guidance Clinic.

He was an associate professor at Wayne State University and was a member of the American Psychiatric association, the Michigan Society of Neurology and Psychiatry and the Royal Medico-Psychological Association of Britain.

A. Herbert Naylor, MD
Milford

Arthur Herbert Naylor, MD, Milford, died Dec. 5 at the age of 78. Doctor Naylor had practiced medicine on the west side of Detroit for nearly 50 years.

Doctor Naylor was a graduate of the University of Toronto medical school and was affiliated with Mt. Carmel Mercy and Detroit General hospitals.

Alger A. Palmer, MD
Chelsea

Alger A. Palmer, MD, Chelsea generalist, died Dec. 15 at the age of 80.

Doctor Palmer was a graduate of the University of Michigan Medical School and was affiliated with St. Joseph Mercy Hospital in Ann Arbor. He was the recipient of two bronze battle stars for service in World War II.

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Here's how to manage patients under Blue Cross non-group contract

By Russell J. Burns
Physician Liaison
Michigan Blue Cross
Detroit

The following interpretation of the Michigan Blue Cross NON-GROUP (under age 65) CONTRACT exclusion is presented in an effort to assist the physician in his relationships with his Blue Cross subscriber patients having this particular contract.

The article was prepared in a continuing effort by the Michigan Hospital Service to maintain good relationships with Michigan physicians and to assist physicians in their relationships with patients. Subsequent articles on other facets of the Blue Cross hospitalization contract will follow in future issues of MICHIGAN MEDICINE.

In Section VI (B-8) of the Blue Cross *Non-Group* contract, the following statement appears: "Hospital service is not available hereunder to any member for a condition existing on the date membership becomes effective hereunder, whether or not known to the member or diagnosed or treated prior to that date, until membership has been effective for at least 180 consecutive days immediately preceding the date of admission to the hospital."

In the Blue Cross application of this restriction in its claims-handling procedures, our staff physicians consider objectively the entire medical picture, including the history of symptomatology and the known natural pathogenesis of the disease involved.

Any acute manifestation of a chronic condition, disease or ailment which existed on the effective date of the subscriber certificate must be considered a pre-existing condition and subject to the 180-day waiting period.

The following are several examples which would be ineligible for coverage under the pre-existing condition exclusion and, consequently, benefits would not be available in the event of hospitalization during this waiting period.

1. Gallbladder disease with stones diagnosed in the 180 day waiting period and symptomatology dating back prior to the beginning effective date of the contract.
2. An acute bladder obstruction from prostatism. The acute obstruction obviously would not have pre-existed but the prostatic enlargement symptomatology may have and if the history is fairly specific on this point, benefits would not be allowed.
3. Established and recognized diabetes suddenly going out of control during the waiting period would be another example where emphasis is placed on the total medical entity—the diabetic state—even though controlled at the time of the contract issuance. In an acute episode, with such a pre-existing diabetic condition, hospitalization benefits would not be allowed.
4. A case of strangulated hernia in a patient with pre-existing hernia.
5. An acute coronary attack in a case of established cardiovascular disease.
6. Removal of cataracts when there is a history of impaired vision.
7. Treatment or removal of hemorrhoids in a patient with a history of pain or bleeding.

The subscription rates for this contract have been established using the above exclusion interpretation. The Blue Cross Non-Group subscriber, therefore, is not paying for something he does not receive.

The integrity of the patient and the lack of intent to exploit Blue Cross by securing coverage after the necessity of hospitalization is known are reasons frequently offered as justification for Blue Cross to accept liability. We can not, in fairness to all concerned, deviate from the policy of adhering to the basic medical facts involved with the case.

IN MEMORIAM/Continued

Albert D. Ruedemann, MD
Grosse Pointe Park

Albert Darwin Ruedemann, MD, founder and former chief of the Kresge Eye Institute, Detroit, died Dec. 30 at the age of 74.

Doctor Ruedemann was co-inventor of the first moveable artificial eye in 1943, for which he received the Gold Medal Award from the American Academy of Ophthalmology and Otolaryngology. He received a second Gold Medal Award for his work in beta radiation and ophthalmology.

He was past president of the section in ophthalmology for the AMA, past president of the American Academy of Ophthalmology and Otolaryngology and secretary for instruction of the latter society for 25 years.

Doctor Ruedemann also was past president of the Michigan Ophthalmology Society and served as chief of ophthalmology at the Cleveland Clinic from 1921 until 1947, when he came to Detroit. He also was a professor of ophthalmology at Wayne State University.

John J. Sauk, MD
Sterling Heights

John Joseph Sauk, MD, a surgeon affiliated with Brent General Hospital in Detroit, died Dec. 10 at the age of 59.

Doctor Sauk was a graduate of the University of Michigan Medical School and was a member of the American College of Surgeons. He had practiced 35 years in the Detroit area.

Norman Schkloven, MD
Detroit

Norman Schkloven, MD, psychiatrist and member of the faculty of the Wayne State University School of Medicine, died Dec. 24 at the age of 47.

Doctor Schkloven was affiliated with Receiving and Sinai Hospitals of Detroit and was a graduate of the University of Michigan Medical School. He was a psychiatric consultant to the Mental Hygiene Clinic of the VA Regional office in Detroit.

Doctor Schkloven was a member of the executive council of the American Psychoanalytical Association and was a councillor for the Michigan Association for Psycholanalysis. He also belonged to the American Psychiatric Association and the Michigan Society for Neurology and Phychiatry.

Archibald L. Seiferlein, MD
Grosse Pointe

Former City of Detroit Physician Archibald Seiferlein, MD, died Nov. 25 at the age of 68.

Doctor Seiferlein was a graduate of the University of Michigan Medical School and was affiliated with Detroit Memorial Hospital.

Frederick B. Steiner, MD
Garden City

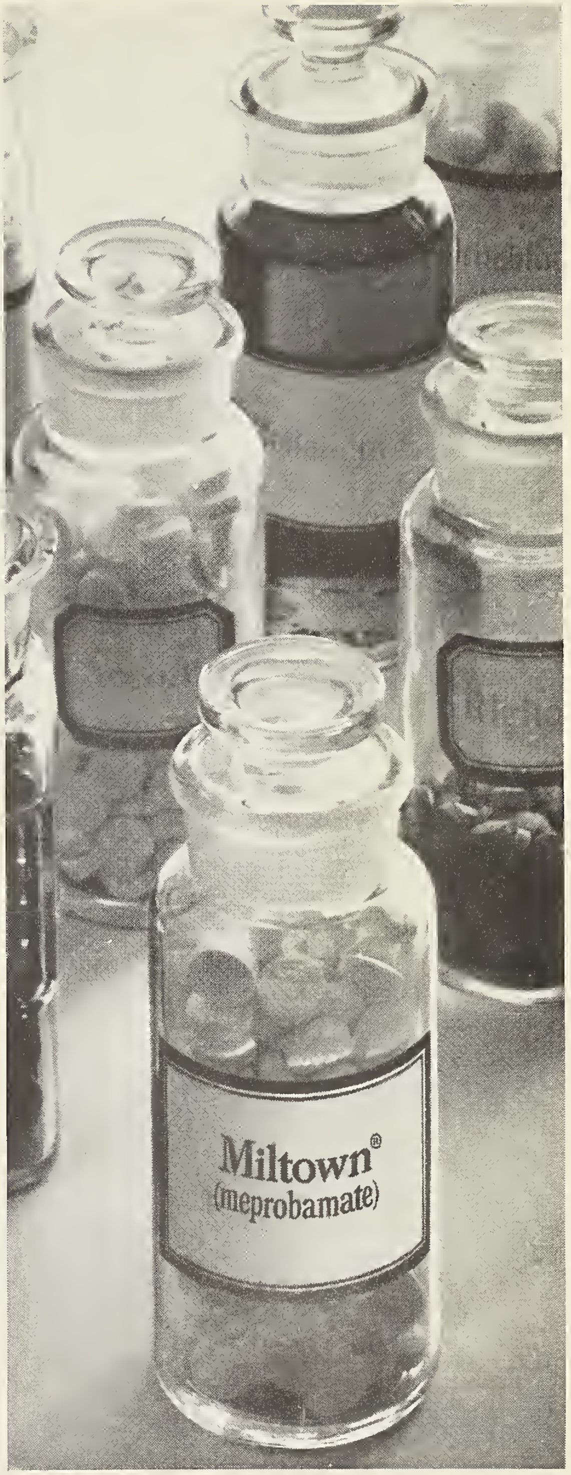
Frederick Brewer Steiner, MD, who practiced medicine in Garden City, died Dec. 11 at the age of 59.

Doctor Steiner was a graduate of Wayne State University School of Medicine and was on the staffs of Providence Hospital in Detroit, Oakwood Hospital in Dearborn and Annapolis Hospital, Wayne.

He was a member of the American Academy of Family Physicians.

Gerber Co. establishes MSU fellowship

The Gerber Products Co. of Fremont has established a "Gerber Fellowship in Human Development" at Michigan State University's College of Human Medicine. Their grant of $15,000 a year will support teaching and research activities for health care benefiting children.



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Sound Off

A physician's fundamental right in a democracy

By Sidney Adler, MD
MSMS President

I become more and more confused when I hear my colleagues, in and out of official channels, speak to the subject of influencing medical economics by bargaining for physicians' services.

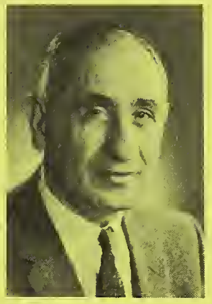
Each of us, of course, influences medical economics by bargaining for his own services. I understand that, but that is not what is being talked about.

Groups of physicians practicing together may bargain for the services of the group, and that, I also understand. It is much the same thing as the individual does, and there is little that organized medicine or other physicians can or should do, legally or philosophically, to limit their right to bargain for their own services on terms and bases which are not obviously unreasonable and which are consistent with the law and ethical principles which govern physicians.

So often, though, I hear my colleagues talking about somebody else "selling his services." He may refer to Blue Shield, or to the Michigan Department of Social Services, or to the U.S. Bureau of Health Insurance, or to industry or to labor. He almost surely is not talking about the hospital to which he serves, or the P.C. of which he is a member, or if he is salaried, the business, government or financial corporation which pays him a salary and which in fact does sell his services, acting under the authority and power which he has given to it.

We should be honest with ourselves. Until now, nobody else has bargained for our services, if we are self-employed and that includes labor, industry, government, or Blue Shield. If we serve a patient upon his terms, it has been because we chose to do so, not because we were forced to do so. In the case of Blue Shield, it would be because some of us chose to participate. Others of us chose not to. In the case of Medicare, it would be because some of us chose to accept assignments. Others of us chose not to. In the case of Medicaid, it would be because some of us chose to serve the State's clients upon the State's terms. We were not compelled to do so.

That is the private system. That is the way I have lived for more years than I like to remember, and the way I hope to live out my span. Nobody but me has sold or can sell my services, whether or not he is a physician.



Doctor Adler

We can't have it both ways. Those of us who want to be self-employed can be self-employed. Those of us who want to be salaried can be salaried. But the self-employed shouldn't complain because nobody else bargains for them, and the salaried shouldn't complain because, while employed, they can only bargain with their employers.

Organized medicine must listen to individual MDs

By Herbert A. Auer, Manager
MSMS Dept. of Communications

An appeal was made recently by Homer M. Smathers, MD, in his inaugural address as the new Wayne County Medical Society president, that leaders of medical societies listen to what physicians are saying about medical organizations.

Doctor Smathers expressed the view that questions are being raised about the effectiveness of medical organizations because "the majority of practitioners feel they are not being heard and are, therefore, not represented." He continued:

"I believe the many splinter organizations recently formed are not an impediment to progress, but rather, represent a desire to be heard. In unity there is strength, which I firmly believe is needed in discussions with pressure groups that would interfere with delivering quality health care. To attain this unity the officers of the AMA, state and county medical societies must improve communication with physicians."

The new WCMS president moved on, stressing that, "I believe the leadership must do more listen-

Doctor Smathers

Doctor Grigg

ing and to implement this thought, I suggest the following:

"1. All Wayne County Hospital staffs be reminded of their geographic representatives and invite the representative to the quarterly staff meetings.

"2. At least two hospital staffs present summaries of newsworthy items for each Detroit Medical Bulletin; the hospitals to be assigned dates in alphabetical order.

"3. The journal of the Michigan State Medical Society enlarge the section on opinion, mailbag, etc.

"4. The state journal to print more summaries of meetings and papers but fewer total scientific papers.

"5. The state medical society meeting be a one-day informational meeting at the conclusion of the House of Delegates and that reference committee chairmen be present to explain the issues which were debated in committee hearings.

"6. That our delegates to the AMA support a major change in format for the annual meeting, even to the consideration of no scientific meeting.

"7. That the AMA journal be a source of information regarding developing social, educational, legislative activities of importance to the membership."

These suggestions were presented by Doctor Smathers, he said, "in an effort to face reality."

Doctor Smathers presented the preceding arguments to back up his several suggestions that medical societies should decrease their efforts in continuing medical education. He supported his contentions by adding, "Outstanding postgraduate courses and programs are available in every large city in the world. Air transportation results in minimum time loss. Hospitals, medical schools, and specialty societies offer educational opportunities by the hundreds. The time and effort formerly expended by the county society on monthly meetings, the state society at its annual meeting, and the national society's annual meeting can now be more fully utilized in a concerted attempt to respond to the desires of the membership."

The inaugural address repeated the plea for unity and new willingness to listen. Doctor Smathers summarized by saying:

"With unity and concentrated effort once again established, sound and constructive ideas for improving the delivery of health care will come from our members. The officers must be listening."

Doctor Grigg suggests changes in Annual Session

By John W. Grigg, MD
Bay City

After the past MSMS House of Delegate's session, I wrote, "The House fails dismally to establish a system of priorities."

What are the reasons for my conclusion? How can remedies be effected for a more comprehensive function by the House of Delegates without sacrificing its deliberative role, or surpressing the expression of grass roots sentiment?

There are submitted too many irrelevant, enigmatic resolutions, and resolutions whose relationship to medicine is obscure. Although of sincere intent, these resolutions are as time-consuming as those which alter basic policy and affect the destiny of the Society for years.

Several profoundly important resolutions at the last session were not given adequate cogitation. A Foundation for Peer Review should receive considerable contemplation both by committee and the entire House. The magnamimous problem of malpractice was briefly examined and disregarded.

Other important issues were not discussed at all. Among them were, which individuals or committee will meet with the State Social Services Department to discuss or negotiate fees under the new Medicaid Program. The quesion is presently emergent since the Department of Social Services has requested our state society to submit a fee schedule.

The Legal Affairs Committee recommended the new 5-digit Relative Value Scale as recently revised. The Council received this recommendation from the Legal Affairs Committee but inferred the question to be of such importance that it should be referred to the House of Delegates. Many individuals in the MSMS were aware of this problem. Certainly it could have been resolved at the last House of Delegates meeting.

Too many similar problems have the same inertia. (The solution may simply be to give The Council more latitude or authority to execute current MSMS problems.)

At present, there is inadequate time allocated to the House of Delegates Committees to properly ponder the complexities of a multiplicity of resolutions. The resolutions introduced from the floor at the first evening's session are especially perplexing, and it is these in particular to which I have reference. Without the opportunity for prior research and study, some deliberations at the committee level are superficial, rhetorical and expressions of personal philosophies. Decisions to recommend approval, disapproval, or substitute resolutions are in some instances hastily formulated, and not in the best interests of the Society.

A change in basic policy for the submission of resolutions is suggested. All resolutions should be submitted 30 days prior to the House of Delegates assemblage. In addition, an accompanying critique should be required to delineate the reasons for the resolution. Further, eliminate introduction of resolutions from the floor unless declared truly emergent by the speaker. This necessitates no inconvenience since the House now convenes twice a year. This will allow the MSMS staff ample time for research and investigation of prior and similar resolutions, and to assemble appropriate commentary. This material can be sent to the various committee members 10 days to two weeks prior to convening. This will allow ample time for study and rumination.

There has recently been formed a new committee, The Committee for Planning and Priorities. With the inception of this committee, the problems of establishing priorities for debate by the House may be solved. It is suggested this committee meet and scrutinize the resolutions before the House assembles.

Certainly it is essential that more knowledgeable direction be given to the House of Delegates to insure that important topics receive the majority of time and consideration.

The institution of these or similar recommendations will not restrict the basic function of the House, and should create more effective operability.

Dedicated action way to build to good county society

By Donald G. May, MD
Kalamazoo

As the newly-elected president of a county medical society, I am aware of the challenge of the office. There appear to be many perceptive physicians who see a crying need for an organization which is capable of serving as a forum for our many and diverse concerns.

Today it is difficult for individual physicians to claim overall knowledge of the changes in medicine.

It is important that we share the many sources of first hand information that are available through the county organization. It is only by becoming more reliably informed that we can discuss the current medical issues with our lay friends in a truly representative manner.

A county president must direct his efforts toward establishing a free exchange between many diverse attitudes and disciplines represented by

(Continued on page 184)

Doctor, take time to say "thanks" to *MM* advertisers

By Robert M. Leitch, MD
Vice Chairman
MSMS Council

Michigan Medicine certainly would be a smaller publication unable to provide good scientific articles and timely news reports unless pharmaceutical manufacturers and other firms purchased advertising each month.

The MSMS Publication Committee sincerely urges MSMS members during 1972 to voice appreciation from time to time to the detail men as they call.

Yes, advertising is down slightly in the number of pages but expenditures are up by 15 per cent in recent years. The firms are using more color printing which adds to costs and naturally advertising rates have been increased to help meet the rising costs of publication.

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Doctor Leitch

Doctor May

the membership. To accomplish this, the selection of reliable committee chairmen is most vital. They should be dynamic persons who demonstrate an interest in matters relating to their particular committee. They should be able to utilize various talents and interests in their committee membership appointments. Selection of leadership primarily on the basis of seniority can be self-defeating. The programs of the society meetings must be related to issues facing the medical community as a whole. Detailed scientific, as well as the entertaining programs, can be found elsewhere and will not draw the majority of the membership out to a meeting after a busy day.

We vary in our awareness of the rapid transitions in medicine today. The new physician accepts a different style of practice than he did 25 years ago. There has been a drastic change in the structure of medical education. Hospitals are becoming more directly involved in the practice of medicine. The extended concepts of peer review require our consideration. We cannot ignore the political drum beat for all-encompassing health programs. The handling of the medical-social programs of alcohol, drugs, and venereal disease deserves our combined effort. The challenge of new concepts in the packaging of health care and the complexities of established fee schedules, add to the many timely concerns.

A recent gathering of county presidents-elect provided an opportunity to note the wealth of talent in the State Society office that is available to assist us, just for the asking. We must continue to elect truly representative delegates to the State Society so that our local interests will be registered on the floor of the House of Delegates.

"Why should I belong to the county medical society?" is a question heard all too frequently. It cannot be answered with catchy phrases but only by dedicated action on the part of county officers and a real feeling of representation by the membership. Out of this should come some constructive action that will be relevant to the changing times in which we live.

This notice may be easily detached by the physician to be posted in a place readily accessible to all patients. It is provided here as a service to MSMS members.

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ATE NEWS FROM THE MICHIGAN STATE MEDICAL SOCIETY

Michigan Medicine

February 23, 1972, Volume 71, Number 6
Michigan State Medical Society
Reading Time: 2 Mins. 40 Seconds

A STRONG LETTER has been sent by MSMS to Governor Milliken protesting his recommendations to discount Medicaid reimbursements to doctors by 3% in fiscal 1972-73 if paid within 30 days.

The MSMS Council authorized Chairman Brooker L. Masters, MD, to send such a letter to the Governor; and the Council authorized other steps in a militant approach to the new situation.

Governor Milliken has been told in the letter that his proposal "is unjust, discriminatory, and detrimental to the objectives of the Medicaid program."

Doctor Masters brought this matter to the attention of the MSMS Council at its last meeting, when the Council members agreed this proposal should be vigorously opposed.

The proposal for the 3% cut was made by Governor Milliken in his Budget Message to the State Legislature. In part, Governor Milliken said: "As the state assumes fiscal agent responsibilities for Medicaid, it is anticipated that faster claims procession will result. As this occurs, providers of medical services will receive reimbursement for services rendered more promptly than has been true with the contracted fiscal agent. To provide an incentive to the department (Social Services Department) to achieve this objective and to reduce the costs of the Medicaid program, the budget recommends that all bills paid within 30 days of receipt be discounted by 3%." The Governor alleges that this discounting proposal can reduce state costs by $2 million, and federal costs by a further $2 million.

EVERY MSMS MEMBER is urged to read the following letter that was sent to Governor Milliken:

"Dear Governor Milliken:

"Doctors of Medicine in Michigan are shocked at your budget recommendation to discount Medicaid bills by 3 per cent in fiscal 1972-73 if paid within 30 days.

"Once again 10,000 physicians have been isolated from Michigan's 9,000,000 people to bear the cost of a particular State financial hardship. Although your budget message said the discount would affect hospitals and physicians, our research causes us to believe it would be contrary to Federal law for all but physicians. We feel this is flagrantly discriminatory.

"We further feel misled and disillusioned. Last December 29, when a delegation from the Michigan State Medical Society met with you and Doctor John Dempsey, we asked you how we could work with you toward improved state medical care programs. We were urged to continue to communicate with you. But we were not told that you were considering discounting Medicaid payments.

"Doctors worked for and supported the implementation of the Medicaid program when it was enacted in 1967. Since then, however, our cooperation and good will has been sorely strained. In December, 1968, Medicaid payment levels were frozen. In 1971 these reduced physician payments were further cut by 10 per cent for a three month period. Still later that year, a moratorium on all physician payments was imposed.

"Now we are faced with further erosion of our relationships with the Medicaid program with its proposed 3 per cent discounting of 1968 physician payment levels.

"It is unjust, discriminatory and detrimental to the objectives of the Medicaid program to penalize physicians and patients in an attempt to resolve the State's financial deficit.

"The greater damage will not be to physicians, however. It will be to the recipients of Medicaid services in the inner city, where Medicaid often comprises more than half of a doctor's practice -- and in some known cases 100 per cent. These doctors must continue to pay their nurses, medical assistants and office personnel; they must pay rent and purchase equipment, supplies and materials. It is difficult enough today on physicians who remain in the inner-city, or serve older residents in rural areas. To impose upon them an arbitrary 3 per cent discount will be unconscionable.

"Your staff should recognize that such a payment reduction for inner-city physicians and those whose rural practice consists largely of Medicaid patients may drive physicians from the very locations where they are most needed.

"The Michigan State Medical Society hopes that you and your staff will reevaluate your recommendation in light of the observations in this letter."

-- Brooker L. Masters, MD, Chairman of The Council

THE MSMS COUNCIL will take additional steps to protest this proposal. Watch for progress reports . . .

* * *

NOTICE: A general meeting of the members of MSMS is called for Tuesday, March 21, at the Detroit Hilton Hotel, immediately following the spring meeting of the House of Delegates, for the purpose of voting on the extension of the corporate term of MSMS, as required by the Corporation and Securities Division of the Michigan Department of Treasury.

Feb. 23, 1972 Vol. 71, No. 6

Michigan Medicine

MICHIGAN STATE MEDICAL SOCIETY

Published three times each month and four times in December and January, 38 issues, by the Michigan State Medical Society as its official journal. Second class postage paid at East Lansing, Mich. and at additional mailing offices. Yearly subscription rate, $9.00. Printed in USA. All communications should be addressed to the Publications Committee, Michigan State Medical Society, 120 West Saginaw Street, East Lansing, Michigan 48823.

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Michigan Medicine

February 29, 1972, Volume 71, Number 7
Michigan State Medical Society
Reading Time: 2 Mins. 45 Seconds

IRST of the Spring House of Delegates meetings will be called to order
y Speaker Vernon V. Bass, MD, at 9 a.m. Monday, March 20 at the Detroit
ilton Hotel. Several reports will be presented and some resolutions
ill be officially introduced. The House then will recess for reference
ommittee meetings. The House will convene at 10 a.m. Tuesday to act on
eference committee reports.

Major item of business will be consideration of the proposed MSMS peer
eview foundation. Copies of the 7th draft of the Foundation bylaws have
een mailed to delegates for study.

GENERAL MEETING CALLED: The Michigan State Medical Society, in order to extend its term as a Michigan corporation, must have a formal vote thereon by its membership.

Of course a meeting of 8,000 members is difficult, if not impossible, but there is a meeting of the House of Delegates on March 20-21, 1972, in Detroit. Notice is hereby given of a meeting of the general membership of MSMS at the Detroit Hilton Hotel to which all members are invited. The membership meeting will be at the conclusion of the House of Delegates meeting. The only item of business will be the question of extending the term of the corporation. It will take 3 minutes of your time. This is official notice to all members of the meeting.

HE STATE AFFAIRS Committee of the Michigan House reported favorably on
SMS-sponsored revised Michigan Medical Practice Act, but the bill was re-
eferred to the Appropriations Committee Friday. Substitute reported to
ouse floor eliminated the physician assistant sections, but left the rest
f the bill generally intact. Votes for certification of physician's
ssistants were lacking. As Substitute HB 5767 was reported, it contains
rovisions for a 10-member Board of Registration all of whom are MDs; an
dvisory Committee to the Board of Registration in Medicine, with three
aymen and two members of the board, who are doctors; provisions for
lternatives for the board to act on medical discipline, including limited
icenses, suspensions and letters of reprimand; adjustments in educational
equirements to coordinate with modern medical education curricula; re-
uirement that all internships be posted with the board; the "Sick Doctor
ct" whereby physicians may be removed temporarily for physical or mental
isability. A legislative study committee to take a long look at physi-
ian's assistant concept is a likely outcome of hearings on HB 5767.

THREE MICHIGAN DOCTORS spent dinner and participated in a working session March 25 with the Subcommittee on Social Services, Michigan House Appropriations Committee. Rep. Raymond Kehres, subcommittee chairman, invited MSMS to present views on Medicaid and the Governor's recommended 3% discount to the three-member subcommittee, including Kehres, Rep. Earl Nelson and Rep. James Farnsworth. Participating for MSMS were Robert E. Rice, MD, chairman, Committee on Government Medical Care Programs; Charles Vincent, MD, president, Detroit Medical Society; and Thomas Berglund, MD, member of both Government Medical Care Programs and Legal Affairs Committees. Dr. Rice is from Greenville, Dr. Vincent from Detroit, and Dr. Berglund from Kalamazoo.

MICHIGAN PHYSICIANS are praised "for their excellent cooperation" in the MMS news release issued Friday which announced that Michigan Blue Shield on July 1 would cut the average base rates by 3.1% for prepaid medical care.

John C. McCabe, MMS president, in the release stated, "Our analysis of payments to physicians indicates that they are seeking lower dollar increases than those to which they are entitled under our own and federal wage and price limitations -- and they are seeking them less frequently." He explained that the rate of physicians' fee increases have tended to stabilize at a rate nearly half that of a year ago in many areas. Mr. McCabe also thanked Shield members for their cooperation "to combat unnecessary utilization of medical services." Blue Cross announced that its rates would be increased 7.6% "because of continuing cost increases in hospitals." The combined result will be an increase in MMS-MHS premiums at an average of about 3½%.

The requests to change base rates have been filed with the Michigan Insurance Bureau.

THE NEW ADVISORY COMMISSION on Drug Abuse and Alcoholism has been appointe by the Governor and includes Richard Bates, MD, Lansing, chairman of the MSMS Committee on Alcoholism and Drug Dependency.

THE LARGEST DELEGATION ever from Michigan -- 56 physicians, wives and children -- will participate in the annual AMA-AMPAC Workshop in Washington, March 9-10-11. MSMS staff has arranged for a special, extra event with members of the Michigan congressional group. Louis Zako, MD, Allen Park, chairman of MDPAC, worked with staffers Sherry Hall and Bruce Ambrose on the details.

MSMS REPRESENTATIVES, osteopathic physicians, insurance carriers, hospital and plaintiff lawyers exposed many of the problems in medical malpractice a forum Monday, Feb. 28, called by the Michigan Commissioner of Insurance the urging of MSMS. The inability of young doctors to obtain insurance coverage for malpractice, the threat of medical college graduates leaving Michigan for a more favorable insurance atmosphere and the rapid increase premiums were cited by Frank Bicknell, MD, MSMS Councilor, Detroit, and Fredrick Weissman, MD, Detroit, speaking for MSMS. The forum was informal in nature and arrived at no particular conclusion other than establishing communications among the interested parties. Members of the Legislative Study Committee on Malpractice and its Advisory Committee sat in.

THE ANNUAL BEAUMONT LECTURE will be presented by E.S. Gurdjian, MD, Detroit, at the Wayne County Medical Society headquarters, Monday evening, April 10. He will discuss "Head Injuries from Antiquity to the Present."

Feb. 29, 1972 Vol. 71, No. 7

Michigan Medicine

MICHIGAN STATE MEDICAL SOCIETY

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MAR 28 1972

ichigan Medicine

March 16, 1972, Volume 71, Number 8
Michigan State Medical Society

te: This issue of Medigram is devoted to legislative issues of 1972 before the ngress and the Michigan Legislature. It was written by Bruce Ambrose, Manager, MS Department of Government Relations.)

MSMS ACTIONS TO OPPOSE PROPOSED 3% CUT

VERNOR MILLIKEN in his state budget message Jan. 20, as you know, made a proposal discount payments to providers of medical services by 3% if Medicaid payments are de within 30 days of receipt of billing.

E MSMS COUNCIL on January 26 voted to oppose such a proposal and a strong letter s sent to Governor Milliken by MSMS Council Chairman Brooker L. Masters, MD. The b. 23 issue of this newsletter carried the full letter.

nce then, MSMS has informed Legislators and the Department of Social Services its strong objection to the proposal.

REE REPRESENTATIVES of MSMS met with the Subcommittee on Social Services of the use Appropriations Committee to explain the MSMS objections. Speaking for MSMS re Robert Rice, MD, Greenville, chairman, MSMS Committee on Governmental Medical re Programs; Thomas Berglund, MD, member of the MSMS Legal Affairs Committee and airman of the MSMS Committee on Public Relations, and Charles Vincent, MD, past esident of the Detroit Medical Society and a member of the Wayne County Medical ciety Council. Officials of the Medicaid project participated in the discussions.

Tuesday, March 14 the House Appropriations Committee reported the Social Services dget Bill, containing Medicaid allocations with additional funds for all providers. e bill does not implement the 3% discount advocated by the Governor. The bill ces a floor fight in the House and then will go to the Senate.

LLOWING is the letter sent March 7 by Governor Milliken to Michigan Medicine about s proposal:

he February 23 issue of Michigan Medicine contained a reprint of a letter which received from Dr. Brooker L. Masters regarding my proposal to discount payments providers of medical services by 3 percent if Medicaid payments are made within days of receipt of billing.

n response I am requesting this letter be printed in the next issue of Michigan dicine, the official journal of the Michigan State Medical Society.

he budget recommendation to discount Medicaid payments to providers of medical rvices by 3 percent if payment is made within 30 days of receipt of billing was veloped with consideration given to the implications upon costs to the Medicaid ogram, costs to providers, and cost to the public at large.

roviders of medical services have long been critical of the Medicaid system cause of delays in reimbursement for services rendered. Such delays, it has been argued, have forced providers to borrow money in order to meet operating costs. Interest paid by the provider on the borrowed funds increases operating costs, thereb increasing the costs to the consumer of medical services.

"As the state assumes fiscal agent responsibilities, it is anticipated the payments to providers will occur more promptly than has been true with the contractual agents. The anticipated result is an increase in the cash flow of providers, thereby decreasi the necessity to borrow funds, thereby decreasing operating costs. Increasing the cash flow of the provider through faster payment also increases the earning potential on cash reserves. Therefore, it is assumed that the 3 percent reduction in payments to providers will have marginal impact upon health costs to the consumer or earnings of the provider.

"The implications to the state and the taxpayer are also marginal. As a result of faster processing of Medicaid bills, the state's earning potential on cash reserves is reduced. The 3 percent reduction will serve to offset the loss of interest which could be earned by delaying payment.

"Therefore, the 3 percent reduction in payment should be considered as an efficiency measure to control Medicaid costs and not an arbitrary reduction. We assume payments will be made within 30 days. When payment is not made within that time period, however, it should be recognized that the 3 percent discount does not apply. Hence, if the state operations are as inefficient as is often charged, payments will not be reduced and status quo will be maintained.

"In summation, it is recognized that 1) this probably is not the perfect solution to control health care costs and meet the needs of Michigan's population, and 2) there is an urgent necessity to continue evaluation of alternatives."

-- William G. Milliken, Governor

MDPAC DELEGATION VISITS WASHINGTON

FIFTY-NINE MDPAC MEMBERS and families met with 12 Michigan congressmen and one senator in a four-day Washington, D.C., visitation March 9-12. Doctors met their congressman at a reception, and then entertained him privately at dinner. Those who attended included Senator Philip Hart and Congressmen Marvin Esch, Garry Brown, Edward Hutchinson, Gerald R. Ford, Charles E. Chamberlain, James Harvey, Guy VanderJag Elford A. Cederberg, Lucien N. Nedzi, William D. Ford, William S. Broomfield and Phili Ruppe. The Michigan doctors and wives participated in the AMPAC workshop. MDPAC hosted the reception the evening of March 9 for the Michigan congressional delegation.

NATIONAL LEGISLATION

1, the omnibus Welfare and Social Security measure, has passed the House and is now
the Senate Finance Committee. Many amendments have been introduced already in-
uding the Bennett PSRO Amendment. That amendment was approved by the Senate Finance
mmittee 8 to 1. The Bennett Amendment would: (1) Permit organizations composed of
acticing physicians (MD and DO) in an area to have priority for designation as a
ofessional Standards Review Organization; (2) If such an organization is not per-
rming, HEW Secretary may appoint another organization to conduct reviews; (3) Mem-
rship in PSRO must be open and voluntary for all doctors of medicine and osteopathy
the PSRO region; (4) Requirement of dues payment to organized medicine or organized
teopathy is waived; (5) Qualifying organizations may not restrict eligibility of
y member for service as an officer of PSRO or assignment to review duties; and
) Review activity would encompass the use of provider, patient and practitioner
ofiles and regional norms as review checkpoints . . . PSRO would determine three
ings: (1) Whether health care services in any given case were medically necessary;
) Whether quality of services meets professionally recognized standards; and
) Whether the proposed hospital or health facility could be provided by more eco-
mical alternative method.
Reported favorably by the Senate Finance Committee, 8 to 1, Bennett Amendment now
part of HR 1, which is expected to receive Senate action in mid-April.

NATOR RUSSELL LONG will offer another amendment to HR 1 embodying his catastrophic
lness insurance proposal. Basic idea is that persons under age 65 could receive
dicare benefits after first $2,000 of costs, and depending somewhat on assets of
tient. Senator Long is expected to push hard for enactment in 1972.

HER MAJOR HR 1 provisions in the health area include: (1) Providing Medicare bene-
ts to an additional 1.5 million disabled persons under age 65; (2) Establishment of
e Office of Inspector General within HEW to oversee Medicare and Medicaid programs;
) Provision for a single Medicare payment to HMOs so that beneficiaries are entitled
both Parts A and B on prepaid contract service; (4) Provisions for incentive to
ates to emphasize comprehensive health care under Medicaid; (5) Establishment of
idelines for strict limitations on charges by physicians; and (6) Provision for
udy of chiropractic services under Medicare and Medicaid.

HR 1 is passed by the Senate with amendments not in the House-passed version, the
o would be sent to a conference committee.

NNEDY-JAVITS HMO BILL was introduced in Senate March 13. It has same far-reaching
tent in contract medical practice as does Kennedy-Griffiths National Health Insurance
ll. Cost is estimated at 25 billions for the first year. Nixon HMO bill was stressed
President's Health Message March 2.

HMO LEGISLATION has been enacted, although HEW has authority to make grants for
perimental contract service. 52 such grants were made in 1971, and goal of
ministration is 450 by July 1, 1973. AMA has testified that voluntary prepaid
oup practice is appropriate element of pluralistic delivery system, but not as a
ngle mode of delivery. AMA urges HMO development on demonstration basis.

USE WAYS AND MEANS Committee will begin executive sessions on national health in-
rance bills in April. Kennedy-Griffiths bill lacks support; Administration Health
rtnership Act is stronger; Medicredit is getting more attention than expected.
st information, however, is that no insurance program will be passed in 1972.

MICHIGAN LEGISLATION

Following are brief descriptions of some of the bills pending in the Michigan legislature of interest to physicians and MSMS:

HB 5767 would rewrite the 1899 Medical Practice Act for medical doctors only. Bill provides alternatives to Board of Registration in Medicine for action on complaints, including limited license, suspensions, letter of reprimand; also "sick doctor act"; Advisory Committee to the Board including laymen and physicians; changes in educational requirements to correlate with modern medical education. Originally bill contained Physician's Assistant certification section, but votes were lacking for passage. HB 5767, reported favorably by House Committee on State Affairs, now lies before House Committee on Appropriations.

HB 4949 AND HB 5574, the first would require "certificate of need" for hospital or health facility construction, and the second would require non-profit health benefits corporations (Blue Cross) to contract with all licensed Michigan hospitals. These bills are connected by language so one cannot be effective unless other is. This may be eliminated by amendment. Both bills have passed House and now are before Senate Committee on Commerce.

SB 1136, introduced by Sen. Pittenger, and HB 5883, introduced by Reps. Snyder and Jowett, are one-sentence bills to repeal Basic Science Act. The Senate bill is before Committee on State Affairs; House bill is before Committee on Public Health.

SB 1133, introduced by Sen. Cooper, would require certification that turtles sold as pets must be certified free of salmonella bacteria contamination. Bill was referred to Senate Committee on Health, Social Services and Retirement.

SB 1212, introduced by Sen. DeGrow, would exempt Canadian medical school graduates from Basic Science Examination. Bill is before the Senate Committee on Health, Social Services & Retirement.

HB 5920, introduced by Rep. Snyder, would give Director, Department of Public Health, determining authority for immunizations required to enter school. HB 5921, introduced by Rep. Snyder as an option to 5920 would eliminate requirement for smallpox vaccination. Both bills lie before House Public Health Committee.

March 16, 1972 Vol. 71, No. 8

Michigan
Medicine

MICHIGAN STATE MEDICAL SOCIETY

Published three times each month and four times in December and January, 38 issues, by the Michigan State Medical Society as its official journal. Second class postage paid at East Lansing, Mich. and at additional mailing offices. Yearly subscription rate, $9.00. Printed in USA. All communications should be addressed to the Publications Committee, Michigan State Medical Society, 120 West Saginaw Street, East Lansing, Michigan 48823. © 1972 Michigan State Medical Society. Phone: Area Code 517, 337-1351.

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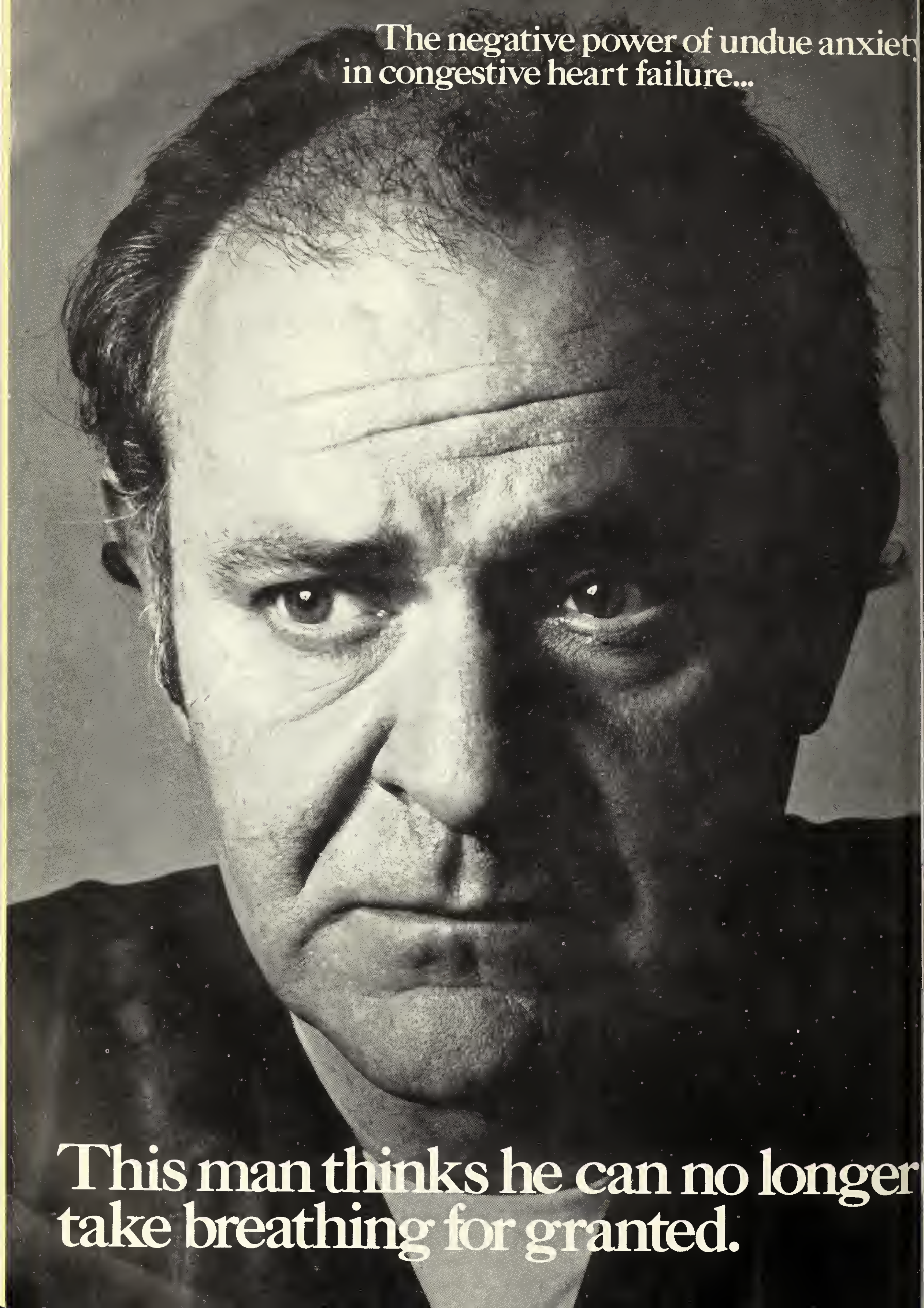
These mentally retarded children have a brighter future, with new state policies as described, starting on page 211.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Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (*e.g.*, excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

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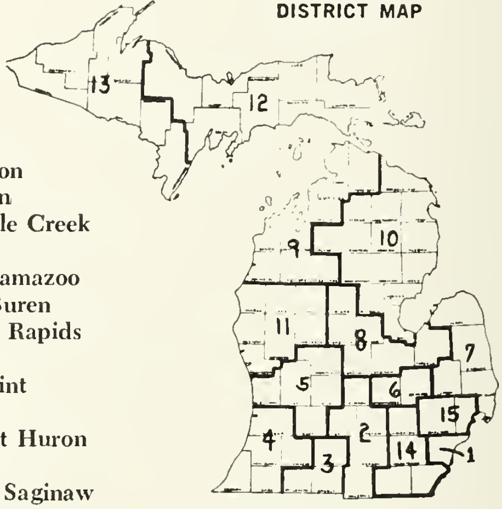
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President's page

At the meeting of the House of Delegates on March 20-21, 1972, there will be three important issues to be considered:

I. The question of a foundation for peer review as a non-profit corporation separate from the Michigan State Medical Society.

II. The update of the Michigan Relative Value Schedule.

III. A report of the Alexander Grant study, Phase II, of the Michigan State Medical Society.

These vital issues should be carefully studied by all members of the House of Delegates and their component county societies.

I. The question is: Can peer rieview best be done at the local county level or by state-wide foundation composed of representatives of Michigan State Medical Society and Michigan Association of Osteopathic Physicians and Surgeons? Peer review is an important activity. It can be defined as a review of a physician's services by his medical colleagues. It should include the *standard* of care. Physicians should monitor and review themselves. I have said it before and repeat it again.

I believe Medicare and Medicaid were poorly planned and poorly administered, spawning huge bureaucracies and extravagant costs and inviting widespread abuses.

I believe that Blue Cross and Blue Shield programs have been in need of review and reform in order to control and limit escalating costs.

I do not believe that a state society-sponsored "foundation" will do any more to eliminate those abuses and control those costs than the state society, Blue Cross, Blue Shield or the federal and state governments have done in the past.

Our profession has suffered from much criticism, some well-founded, most unfounded, from various sectors of the community. If we follow the foundation-peer review path, we will be blamed for every shortcoming of government, Blue Cross, Blue Shield, and to some degree, the insurance industry. Costs which we cannot control will continue to escalate and we will have to bear the blame and onus.

I believe, therefore, that if our society puts itself in that position, it is either stupid or greedy or both. I don't think we are being greedy, but we will be charged with it. I do think we are being stupid.

Perhaps a better mode of accomplishing the analysis of peer review, would be by a federation of the various types of medical practice (solo, group, HMOs, medical university groups, hospitals, clinics, etc.). By pooling the experience and experimentation of its members, such a federation possibly could do a better job. A better delivery system should evolve and hopefully curtail unnecessary costs. Axiomatically, high standards of medical care are costly, but poor medical care is even more costly. The various methods of delivery of health care have approximately the same cost when carefully analyzed. The standards and appropriateness of the medical care must be in the control of physicians. Underutilization is worse than overutilization for our patients.

Sidney Adler, MD
MSMS president

Such a system will be capable of constant improvement and can be altered to meet changing needs of the public.

II. The update of the revised Michigan Relative Value system must be analyzed as to its fiscal impact in comparison to the previous Michigan Relative Value Scale. Do we really want a fee schedule or the usual, customary and reasonable charge? Can we have one schedule for one group of patients and another schedule for other patients? Current procedural terminology in a five-digit computer is not the entire answer; It is merely a tool.

III. Phase II of the Alexander Grant Study has not been analyzed. And the House of Delegates should not make any final judgments in haste. The House of Delegates authorized the study. Judgement, reason and careful deliberation are essential. Neither the wisdom of a Solomon nor the leadership of a Moses can lead us out of the wilderness or part the waters for us.

Political expediency may be a factor but our patients' needs should be paramount in our minds and deliberations.

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Publication of **Michigan Medicine** is under the direction of the Publication Committee, Michigan State Medical Society. The scientific editor is responsible for the scientific content. The managing editor is responsible for the production, correspondence and contents of the journal. He and the executive editor share final responsibility of the entire publication.

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MICHIGAN MEDICINE is the official organ of the Michigan State Medical Society, published under the direction of the Publication Committee. Published Semi-Monthly, Trimonthly in January and December; 26 issues, by the Michigan State Medical Society as its official journal. Second class postage paid at East Lansing, Mich. and at additional mailing offices. Yearly subscription rate, $9.00; single copies, 80 cents. Additional postage: Canada, $1.00 per year; Pan-American Union, $2.50 per year; Foreign, $2.50 per year. Printed in USA. All communications relative to manuscripts, advertising, news, exchanges, etc., should be addressed to Judith Marr, Michigan State Medical Society, 120 West Saginaw Street, East Lansing, Michigan 48823. Phone Area Code 517, 337-1351.
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Warnings: Use during pregnancy is to be avoided.
Precautions: 1. *Starvation Ketosis:* This must be differentiated from "insulin lack" ketosis and is characterized by ketonuria which, in spite of relatively normal blood and urine sugar, may result from excessive phenformin therapy, excessive insulin reduction, or insufficient carbohydrate intake. Adjust insulin dosage, lower phenformin dosage, or supply carbohydrates to alleviate this state. **Do not give insulin without first checking blood and urine sugar.**
2. *Lactic Acidosis:* This drug is not recommended in the presence of azotemia or in any clinical situation that predisposes to sustained hypotension that could lead to lactic acidosis. To differentiate lactic acidosis from ketoacidosis, periodic determinations of ketones in the blood and urine should be made in diabetics previously stabilized on phenformin, or phenformin and insulin, who have become unstable. If electrolyte imbalance is suspected, periodic determinations should also be made of electrolytes, pH, and the lactate-pyruvate ratio. The drug should be withdrawn and insulin, when required, and other corrective measures instituted immediately upon the appearance of any metabolic acidosis.
3. *Hypoglycemia:* Although hypoglycemic reactions are rare when phenformin is used alone, every precaution should be observed during the dosage adjustment period particularly when insulin or a sulfonylurea has been given in combination with phenformin.
Adverse Reactions: Principally gastrointestinal; unpleasant metallic taste, continuing to anorexia, nausea and, less frequently, vomiting and diarrhea. Reduce dosage at first sign of these symptoms. In case of vomiting, the drug should be immediately withdrawn. Although rare, urticaria has been reported, as have gastrointestinal symptoms such as anorexia, nausea and vomiting following excessive alcohol intake.
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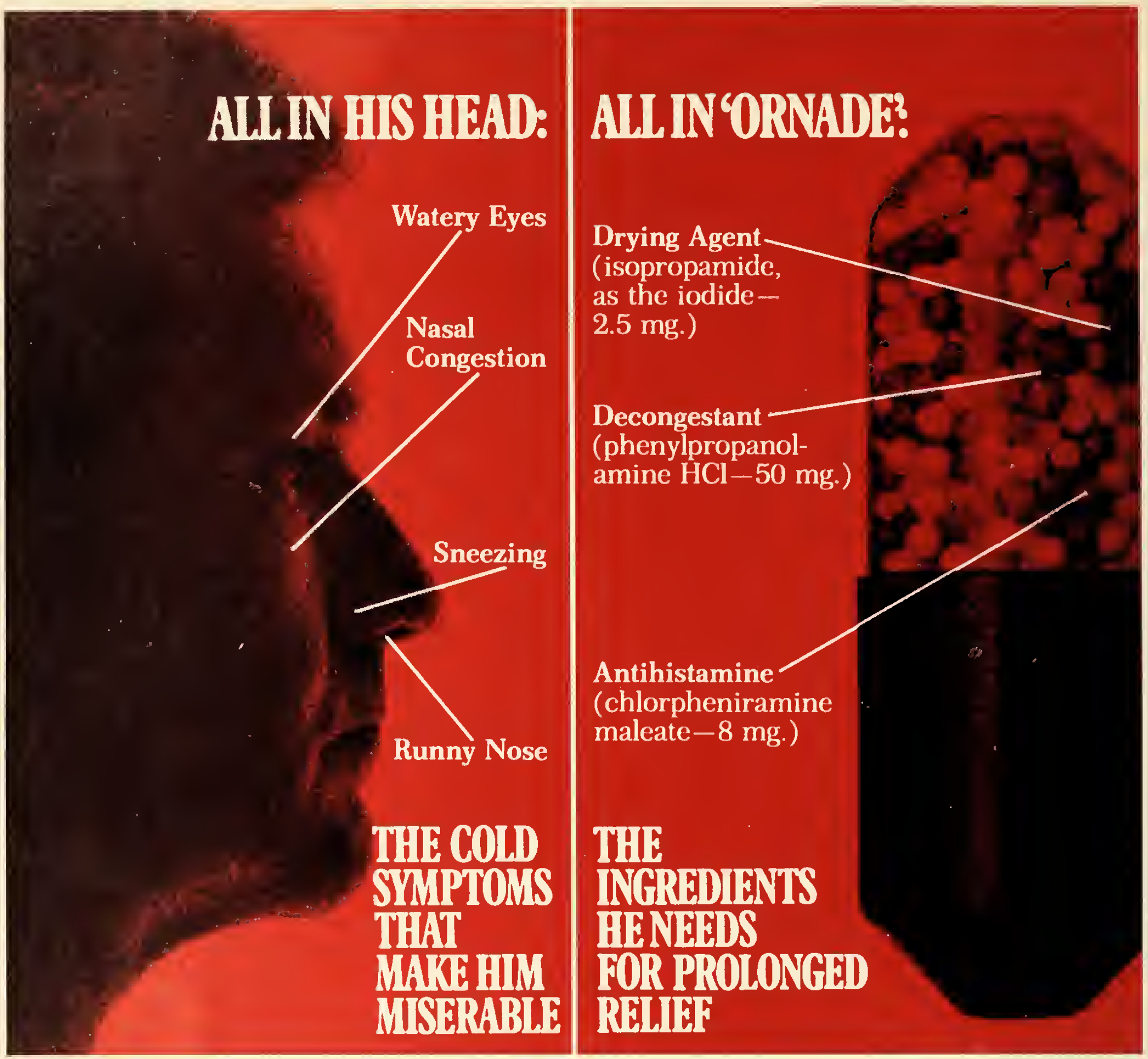
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Warnings: Advise vehicle or machine operators of possible drowsiness. Warn patients of possible additive effects with alcohol and other CNS depressants.

Usage in Pregnancy. In pregnancy, nursing mothers and women who might bear children, weigh potential benefits against hazards. Inhibition of lactation may occur.

Effect on PBI Determination and I^{131} Uptake. Isopropamide iodide may alter PBI test results and will suppress I^{131} uptake. Substitute thyroid tests unaffected by exogenous iodides.

Precautions: Use cautiously in persons with cardiovascular disease, glaucoma, prostatic hypertrophy, hyperthyroidism.

Adverse Reactions: Drowsiness, excessive dryness of nose, throat or mouth; nervousness; or insomnia. Also, nausea, vomiting, epigastric distress, diarrhea, rash, dizziness, weakness, chest tightness, angina pain, abdominal pain, irritability, palpitation, headache, incoordination, tremor, dysuria, difficulty in urination, thrombocytopenia, leukopenia, convulsions, hypertension, hypotension, anorexia, constipation, visual disturbances, iodine toxicity (acne, parotitis).

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'Specter of liability one of the causes in malpractice claims'

"Availability of legal services for a contingency fee undoubtedly has had major impact on the incidence of malpractice claims."

That statement was made by Arthur J. Mannix, MD, AMA spokesman, at one of the recent hearings held by the new HEW Commission on Medical Malpractice. Doctor Mannix is the former chairman of the Malpractice and Defense Board of the Medical Society of the State of New York. The Commission is holding five hearings to explore the national aspects of professional liability problems.

Despite continuous improvement in the quality of medical care, physicians have been subjected to constantly rising premium costs for liability insurance, Doctor Mannix stressed. He reported that only a small part of the sum spent for liability coverage goes to claimants as compensation.

Doctor Mannix said AMA statistics show that physicians in 1968 paid a total of $75 million in professional liability premiums but only $20 million went to claimants. The bulk of the liability dollar, he said, went for legal and investigation expenses ($18 million) and for contingency fees and expenses of claimant's attorneys ($15 million).

The specter of liability is one of the causes of claims, Doctor Mannix said. "Perfect—or near perfect—solutions to medical problems are more and more expected by the general public and there is also an increasing public tendency to sue doctors."

Ways must be found to provide equitable protection to patients and physicians without causing any unreasonable increase in medical care costs, the AMA spokesman declared at the HEW hearing.

MSMS will cooperate in gathering of health statistics

MSMS was represented at a meeting late in January in Detroit to explore ways that Michigan can collaborate in a gathering of federal, state and local statistics to support the country's health programs.

John Anthony, chief, MSMS Bureau of Economic Information, offered MSMS cooperation at the joint meeting of the Committee to Evaluate the National Center for Health Statistics and related operations, and Michigan's Ad Hoc Committee on Health Statistics and Computer Systems.

Michigan Department of Public Health has drawn up a grant proposal for more than $2 million under the research and development phase of the new Cooperative Federal-State-Local Health Statistics system.

Medico-legal

The AMA's CITATION newsletter, prepared by the AMA Law Department, lists the following cases involving health personnel in Michigan. Persons interested in obtaining more information on individual cases may write MSMS headquarters.

"Damages may be recovered for death of fetus"
Michigan Supreme Court, July 7, 1971
from *Citation,* Vol. 24, No. 6

"Failure to hospitalize infant is basis for suit"
Michigan Court of Appeals, April 27, 1971
from *Citation,* Vol. 24, No. 6

"Malpractice Statute of Limitations protects nurse"
Michigan Court of Appeals, April 26, 1971
from *Citation,* Vol. 24, No. 6

"Child Can Recover
For Prenatal Injuries"
MICHIGAN SUPREME COURT, JUNE 1, 1971
from *The Citation,* Oct. 15, 1971

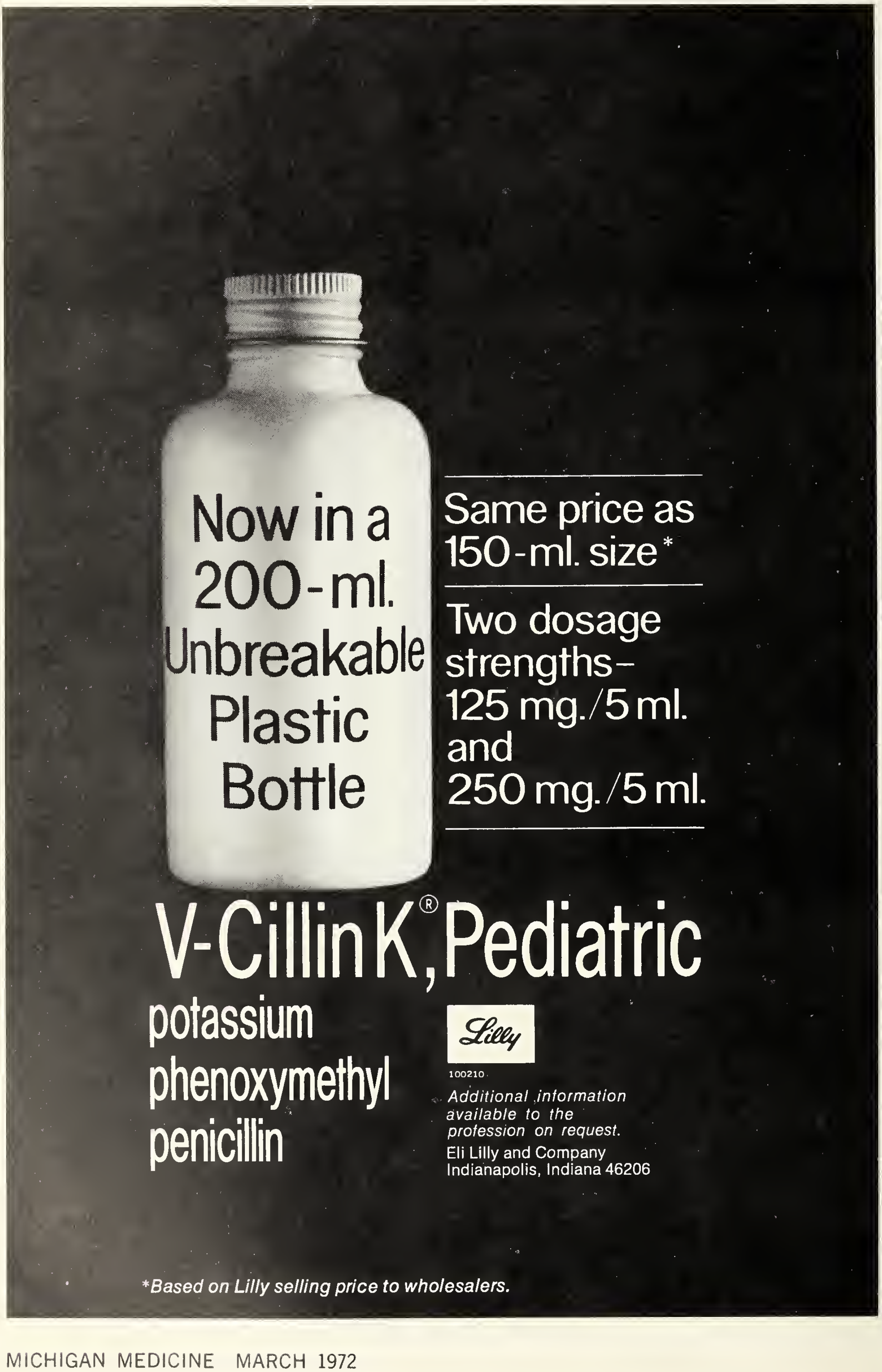
"Reassurance or contract to cure?
Jury must decide"
MICHIGAN SUPREME COURT, JULY 7, 1971
from *The Citation,* Vol. 23, No. 12

U-M interns, residents not a bargaining unit, Appeals Court says

The interns and residents at the University of Michigan are not public employes and therefore the University need not bargain with them, the State Appeals Court has held.

The interns, residents and post-doctoral fellows associated with the University Medical Center formed an association for collective bargaining purposes but the University has refused to bargain with them.

The appeals court ruling in January reversed a ruling by the Michigan Employment Relations Commission favorable to the association.



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Scientific papers

A case report:

Idiopathic pulmonary hemosiderosis:

Use of gastric washings in diagnosis

By Julio Badin, MD
Willys F. Mueller, Jr., MD
Flint

Idiopathic Pulmonary Hemosiderosis (IPH) is a relatively rare disease of childhood and young adults with a well-defined clinical course of repetitive episodes of respiratory distress, hemoptysis, pulmonary infiltration, iron deficiency anemia, pulmonary fibrosis and eventual terminal cardiorespiratory failure.

Although originally described by Virchow[1] in 1851 the first clinical report by Ceelen[2] did not appear until 80 years later. Borsos-Nachtnebel[3] reported the first adult case, a 38-year-old man, supporting his clinical impression with roentgenologic, clinical and pathologic findings. Waldenstrom[4] in 1944 published his findings in a 16-year-old girl. Wyllie, et al.[5] presented a comprehensive description of the disease in 1948, collecting 17 cases from the literature and adding seven cases of their own. Ognibene[6] in 1963 collected 52 cases of IPH in adults, added one of his own and published an excellent review of the symptomatology of the disease in adults.

The following report documents the occurrence of IPH in a two-year-old child who presented with intermittent recurrent episodes of respiratory distress, fever and iron deficiency anemia. The interesting feature in this case is that the diagnosis of IPH was made clinically on the finding of hemosiderin-laden macrophages in gastric washings.

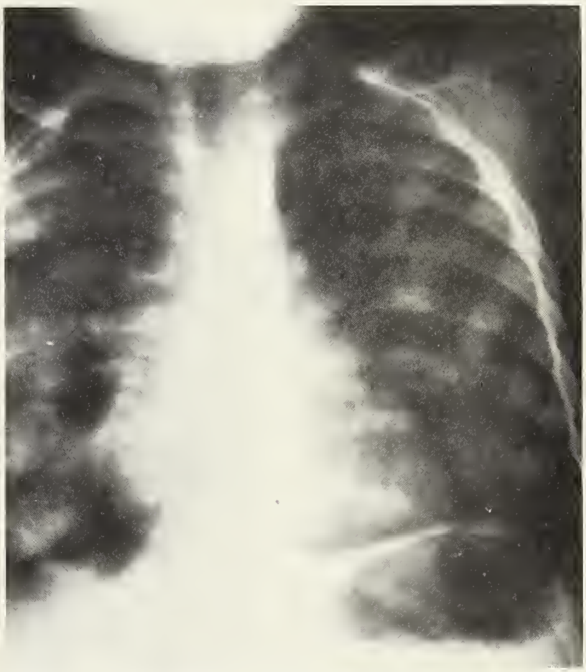

Fig. 1. X-ray taken on first admission showing extensive infiltration of both lung fields.

Case Report

On April 5, 1969 a two-year-old Negro boy was hospitalized because of a slight cough, fever of three days duration, and anorexia. The only physical findings were marked pallor, lethargy, and acute respiratory distress with bronchial breathing bilaterally.

Temperature was 99.8°F; pulse 170/min.; respirations 50/min.; and blood pressure 120/60. X-rays of the chest (**Fig. 1**) demonstrated an extensive infiltration of both lung fields without pleural effusion. The cardiac silhouette was within normal limits. Significant laboratory findings included a hemoglobin of 2.9 grams per cent with hematocrit of 12%, reticulocytes 9.4%, MCV 67 u^3; MCHC

Doctor Badin is a resident in pathology and Doctor Mueller is associate pathologist at Hurley Hospital, Flint.

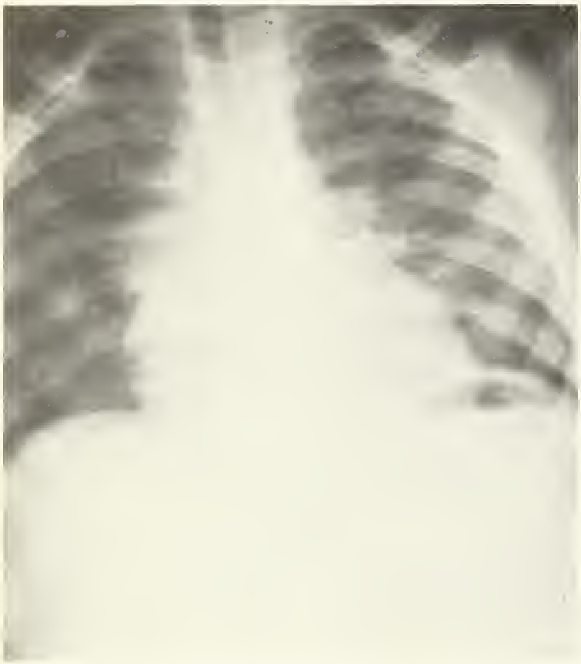

Fig. 2. X-ray taken five days later. Note the marked clearing of the infiltrative process of both lungs.

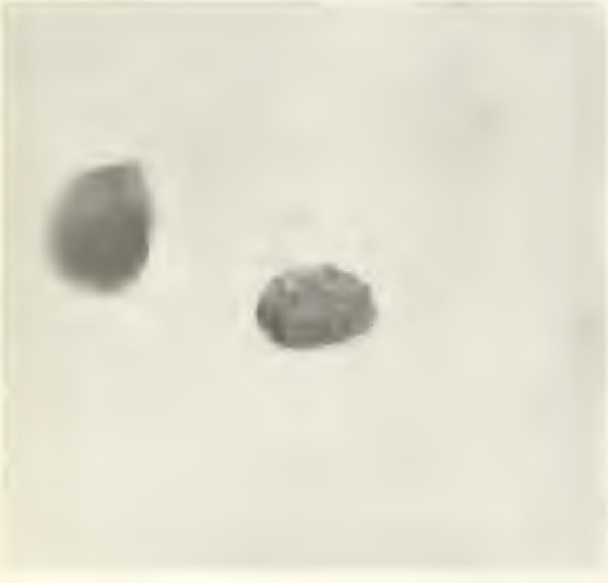

Fig. 3. Note obliteration of cellular morphology of macrophages by iron pigment stained with Prussian Blue stain (900x).

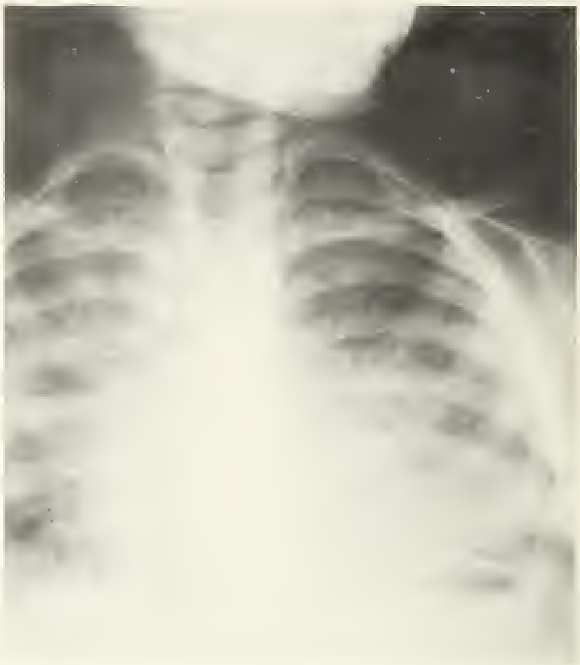

Fig. 4. X-rays taken 3 days before death. Note diffuse and extensive pulmonary infiltrate.

24%; MCH 16 uug. Red cells displayed marked anisocytosis, poikilocytosis and polychromasia with moderate hypochromasia. Urine urobilinogen was positive 1:40 dilution. Direct and indirect Coombs tests were negative. Sickle cell preparations, serum electrophoresis and coagulation studies failed to demonstrate any abnormalities. Total bilirubin was 2.6 mg. per cent with 0.8 mg. per cent direct. Therapy consisted of blood transfusions, ampicillin, aminophylline and oral iron.

The patient's temperature fell to normal approximately seven days after admission and there was almost complete clearing of the infiltration on chest x-ray (**Fig. 2**) when he was discharged asymptomatic eleven days after admission.

On April 28, 1969 he was re-admitted because of fever, cough and respiratory distress. Chest x-rays revealed a similar infiltrative process. Microcytic hypochromic anemia was again noted. Bone marrow examination revealed normoblastic erythroid hyperplasia with decreased iron stores. Two weeks later there was marked improvement and the patient was discharged asymptomatic 17 days after admission.

On May 16, 1969 hospitalization was again required because of cough, fever, and similar x-ray and laboratory findings. Immunoglobulin studies were normal. Osmotic fragility was diminished. Sputum specimens were negative for hemosiderin-laden macrophages and *Pneumocystis carinii.* Treatment consisted of antibiotics, antitussive agents and antipyretics. On June 5, 1969 he went home asympomatic.

On re-admission, 20 days later, he presented with similar clinical, x-ray and laboratory findings. Cell blocks and pap smears prepared from gastric washings and stained with Prussian Blue contained many hemosiderin-laden macrophages (**Fig. 3**). The diagnosis of idiopathic pulmonary hemosiderosis was made based on clinical picture and gastric washings. Prednisone (12 mg. every other day) was added to the therapy and the patient was sent home on July 9, 1969. On July 16, 1969 the patient was re-admitted for the fifth time because of anemia and similar lung changes. Clinical improvement was obtained with larger doses of prednisone (5 mg. every six hours), ampicillin, oral iron therapy and cough syrup. However, on July 27, 1969, a week after discharge, similar physical complaints and findings made hospitalization necessary. Treatment was similar and clinical response was apparent.

On August 16, 1969, the patient was re-admitted for the last time because of cough, shortness of breath and fever. This admission, one day after discharge, was necessitated because of recurrent pulmonary hemorrhage. His hemoglobin progressively fell to 4.8 grams per cent. Six days after admission the serum bilirubin was 10.5 mg.%. Chest x-rays again revealed a similar parenchymatous infiltrate of a severe degree (**Fig. 4**). Treatment included ampicillin, antitussives, prednisone, and starting August 18th, deferoxamine (0.5 gm. intramuscularly every six hours). He had multiple episodes of hematemesis and his condition progressively deteriorated and he died August 24, 1969.

Autopsy Findings

The body weighed 25 lbs., measured 72 cm. in length and exhibited marked pallor of the skin and mucous membranes and scleral jaundice.

The right and left lungs, weighing 150 and 145 grams respectively, were consolidated but without discrete nodulation. The external surfaces were smooth and red-brown, with focal yellow-brown discolored areas. On sectioning, the lungs revealed yellow-brown discoloration with consolidation and evidence of hemorrhage. A considerable amount of blood and edema fluid could be expressed from the surface. Recent pulmonary emboli were identified in the larger branches of the pulmonary artery.

The heart weighed 65 grams and there was dilatation of the right atrium as well as the pulmonary conus. The right ventricle measured 3 mm. in thickness. Small mural thrombi were seen in the right ventricle attached to the septum. Microscopic examination of the lungs revealed that the alveoli were filled with red blood cells and hemosiderin-laden macrophages. In some areas they also contained fibrin. The alveolar septa were thickened. In focal areas there was fibroblastic proliferation and organization of hemorrhage (**Fig. 5 and 6**). Prussian Blue stains revealed abundant iron in the macrophages and also in the alveolar septa and vessel walls (**Fig. 7**). A

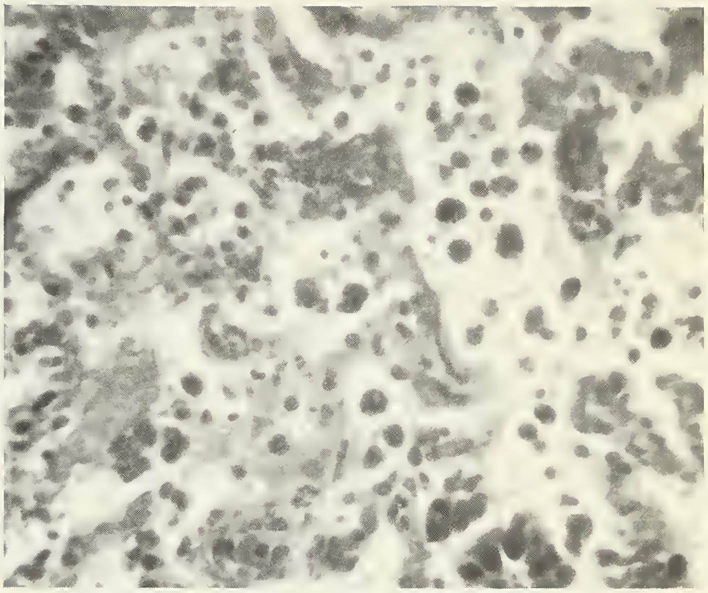

Fig. 5. The alveolar spaces are filled with red cells and pigment-laden macrophages (450x).

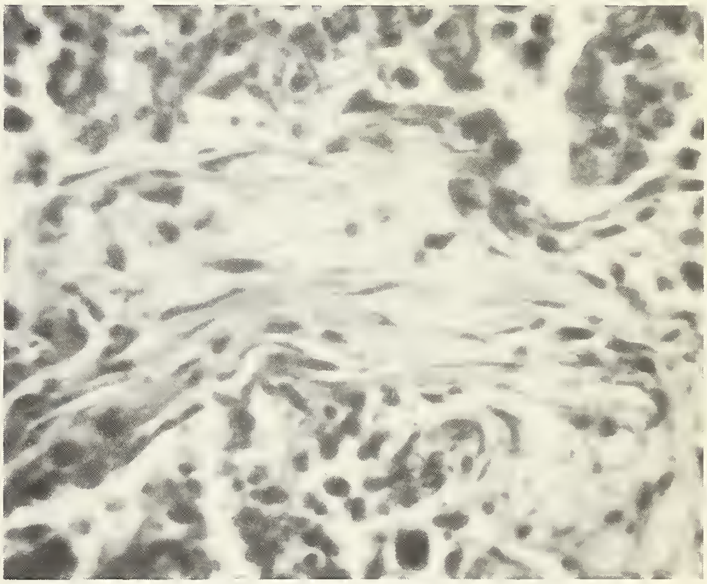

Fig. 6. There is early organization with ingrowth of fibroblasts into the alveolar spaces. Numerous pigment-laden macrophages are again noted (450x).

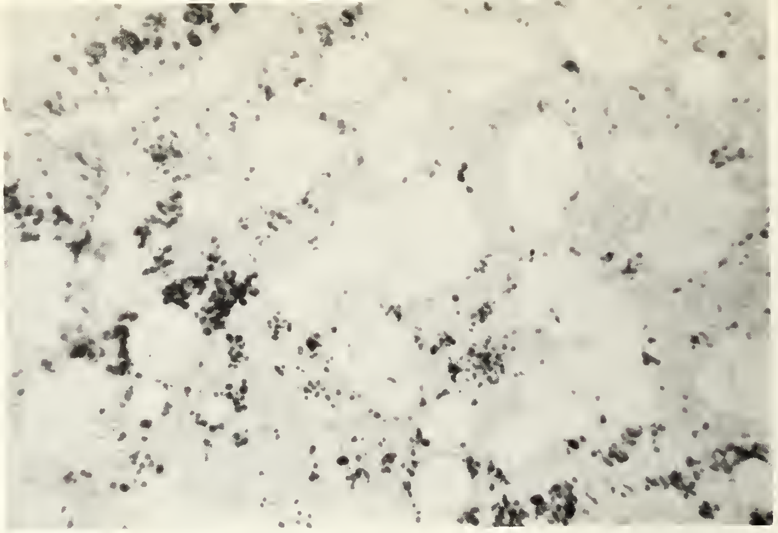

Fig. 7. In Prussian Blue stain the pigment-laden macrophages are quite prominent and there is deposition of iron pigment in the alveolar duct and septa (100x).

recent embolus occluded the lumen of a large pulmonary artery (**Fig. 8**).

Sections of the other organs revealed no evidence of hemosiderosis. The bone marrow was hypercellular with erythroid hyperplasia. The iron content of ashed lung tissue was 10 times greater than a normal control. Five grams of lung tissue were ashed and the resulting ash was reconstituted with 30% Nitric Acid. The resulting mixture was then centrifuged and the iron content of the supernatant solution was determined. The procedure used for iron determination was the American Monitor System (method of Goodwin-modified).[7]

Discussion

Although many theories have been postulated, the exact etiology of IPH is unknown. Some authors[2,4,5] suggest a primary developmental abnormality of the elastic fibers in the lungs with subsequent fragmentation. This leads to marked stasis in the capillary vessels with intra-alveolar hemorrhage. Schidegger and Dreyfus[8] reported a case in which the first symptoms had occurred at the age of 3 months and death in one year. They could not detect defective development nor fragmentation of the elastic fibers in the lungs. Steiner[9] also stressed the failure to show deficiency or destruction of elastic tissue in his three cases of fulminating IPH. The case reported herein had a short and fatal course of six months and no anomaly of the elastic fibers could be demonstrated. Areas of thickening and fibrosis of the alveolar wall were seen only in the organizing lesions; fragmentation of elastic fibers was not striking.

These findings seem to suggest that fragmentation of elastic fibers and the fibrotic thickening of the alveolar wall are the results rather than the cause of the disease.

Another theory is that antibodies are formed in IPH, the pulmonary alveoli acting as the shock organ. Support for this theory is based on the repetitive nature of the disease, the occasional eosinophilia noted, lymphoid hyperplasia and lymphocytic and plasmocytic infiltration of bronchioles reported in some cases. The apparent response to corticosteroids and the alleged beneficial effects of splenectomy lend credence to this position. Soergel and Sommers[10] searched for antibodies to human lung and kidney tissues in the serum of six patients with IPH. Various methods were used and no antibodies to this human tissue antigen could be demonstrated.

Others[11,12,13,14] have postulated that a disturbance of the vaso-motor control in the pulmonary artery was responsible for the pulmonary hemorrhages by increasing the intrapulmonary vascular pressure. But, pulmonary hypertension, cor pulmonale, and right sided heart failure are uncommon in IPH, and right heart catheterization shows normal pressure values in most of the cases. The exceptions are seen in only protracted illnesses. Viral infection has also been incriminated as well as inhalation of directly irritating or allergenic substances. Soergel and Sommers[10] feel that IPH is a primary disease of the pulmonary alveolar epithelial cells which affect the mechanical stability of the alveolar capillaries and leads to widespread alveolar capillary hemorrhages of variable intensity.

Clinical Features

IPH usually commences in early childhood, but may be delayed until adulthood. Most children are in the middle of their first decade and most adults are under 30. There is no difference in the sex distribution in children; however in adults, the male sex predominates 2:1[6]. No hereditary nor familial predisposition is present in this condition. The condition has no typical pattern but usually is characterized by recurrent acute or subacute episodes of dyspnea, cyanosis, cough with hemoptysis, fever, tachycardia and anemia. These symp-

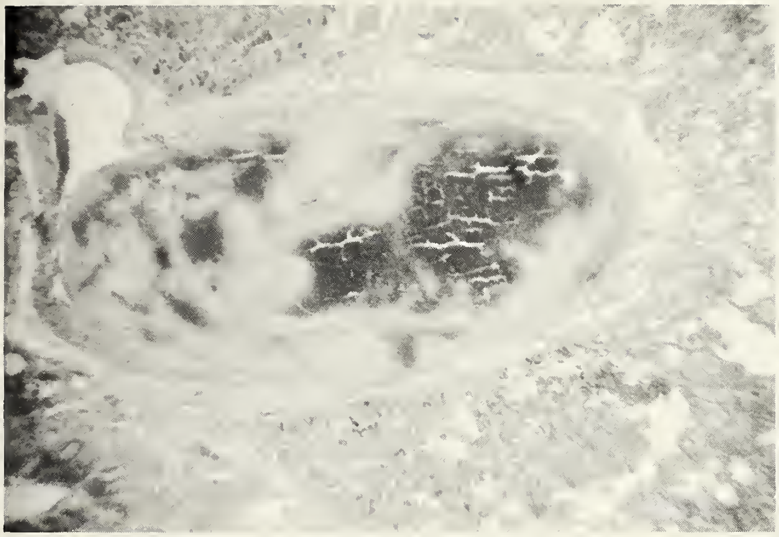

Fig. 8. A recent embolus completely occluded the lumen of a pulmonary artery (50x).

toms are precipated by continuous mild or severe sudden intra-alveolar hemorrhage. During remission, there may be apparent complete recovery but frequently some dyspnea and anemia remain. Jaundice can be present. Weakness and weight loss are frequent. Occasionally there is generalized lymphadenopathy. The severity of attacks depends on the degree of pulmonary hemorrhage. Fever may be present in acute or subacute episodes. These attacks can be confused or misdiagnosed as pneumonia.

The mean duration of the fatal cases reviewed by Soergel[15] was 2.9 years, the shortest being 5 weeks and the longest 10 years. Fine rales and dullness to percussion over the bases is a common finding on physical examination. In patients who survive for several years, clubbing of the fingers may develop and pulmonary hypertension with cor pulmonale and right sided heart failure may occur. Hepatosplenomegaly can be present in about 20% of the cases.[10]

Chest x-rays usually vary with the stage of the disease. Initially, diffuse homogeneous opacities may be seen, although at times the denser areas are localized to the mid or central lung fields. The apices are usually clear but when involved may have a coarse, mottled appearance. With the passage of time, a flecked reticular pattern becomes apparent and complete clearing may result. With recurrence, x-rays will show a similar type of infiltrate. With progression of the disease the roentgenologic appearance characteristic of pulmonary fibrosis may occur and persist. Moderate heart enlargement may be present mainly in the long standing cases.

Laboratory studies reveal a hypochromic, microcytic anemia in the vast majority of the cases. Serum iron levels are low with a normal or a moderately elevated iron binding capacity. Reticulocytosis is common. Serum bilirubin and urinary urobilinogen are slightly elevated during crisis, presumably due to hemoglobin destruction in the intra-alveolar blood. The serum total protein concentration is slightly decreased. Measurements of the clotting mechanism, iron metabolism and capillary fragility are within normal limits. Eosinophilia up to 20% has been reported in about one out of eight cases.[10] Coombs tests are generally negative, however positive direct Coombs tests during episodes of bleeding have been reported.[16] Fifty percent of Soergel and Sommers[10] tested cases and five of six cases reported by Wyllie, et al.,[5] had a cold agglutinin. The anemia is due to hemorrhage into the lungs with excessive deposition of iron which is not available for hemoglobin synthesis. This has been confirmed by several authors[6,10,17] using radioiron and radiochromate. Injected red cells from a normal donor have been found to have a normal life span in patients in remission with normal serum iron level, and the patient's red cells have normal survival in a normal recipient. Right heart catheterization performed during remissions are usually normal and in only occasional long standing cases is there demonstrated an elevated pulmonary pressure.

The case reported herein revealed no clinical evidence of right sided heart failure; however at autopsy, thickening of right ventricle, right atrium and a prominent pulmonary conus, probably due to cor pulmonale and mural thrombus formation in the right ventricle with large pulmonary emboli were found. There was also congestion of lungs, liver and spleen, presumably due to terminal heart failure. Few cases reported in the literature have been complicated by cardiac mural thrombosis and embolization.[18,19] The literature is scant regarding pulmonary function studies. In a few cases, normal values of vital capacity were reported while in others the values were slightly altered. Examination of sputum, gastric washing, lung aspiration or lung biopsy are striking in showing numerous hemosiderin-laden macrophages. Since sputum is difficult to obtain from small children, several gastric washings should be done before lung aspiration or biopsy are attempted. In this case two initial sputums were negative but later the diagnosis was verified by the demonstration of many hemosiderin-laden macrophages in the gastric washings.

Pathological findings

Repeated intra-alveolar hemorrhages are responsible for the pulmonary changes, and the appearance and color of the lungs will vary as to the age of the hemorrhage. The lungs appear heavy and retain their shape and there is very little aerated tissue. Typically, they have a mottled brown and red-purple discoloration but the pleural surface is fairly smooth and homogeneous. The more recent hemorrhages will be bright red or dark purple and the older hemorrhages will be represented by brown discolored areas irregularly distributed. Microscopic findings will also vary as to the stage of the disease. In the areas of recent hemorrhage there will be intact red cells filling alveolar spaces with occasional pigment-laden macrophages. In other areas there will be proliferation of fibroblasts with organization and numerous hemosiderin-laden macrophages will be within the areas of organization and fill numerous alveoli. Macrophages will also be present in the alveolar septa and in the walls of small blood vessels. Elastic fibers of the alveolar septa and small medium-sized blood vessels may exhibit some degree of fragmentation and degeneration. In long standing cases, marked thickening of the alveolar wall and fibroblastic proliferation will be noted. Abnormal deposition of hemosiderin in organs other than the lungs and mediastinal lymph nodes is generally absent. In IPH the iron content of washed and dried lung tissue is markedly increased, the degree proportional to the duration of the disease. In some cases minimal hemosiderosis of the liver and spleen may be present secondary to repeated blood transfusions and prolonged iron therapy. Prussian Blue stains are very striking in that these pigment-laden macrophages stain very strongly for iron.

Therapy

The chronic iron-deficiency anemia due to continuous and slow pulmonary bleeding requires almost constant iron medication, and in many cases, blood transfusions. A few cases of slight accumulation of iron in liver and/or spleen have been reported and were attributed to iron therapy and transfusions. Blood transfusions and iron therapy were used in our case and no hemosiderosis was seen in other organs. Some authors postulate that IPH is an immunologic problem and have used corticosteroids or ACTH as a primary form of treatment. Other clinicians, however, have utilized these drugs only as a last resort to prevent pulmonary fibrosis.[20] Soergel and Sommers[10] reviewed 28 cases in which the patients were treated with corticosteroids and have obtained the following impressions:

1) Corticosteroid therapy, in short term use during bleeding episodes, speeds recovery and perhaps improves the patient's immediate prognosis.

2) Prolonged steroid therapy does not alter the course or prognosis of the basic disease.

Other case studies using the same form of therapy and our similarly treated case support the above impressions. Splenectomy was advocated as the treatment of choice by Steiner[9] who considered IPH to be an immunologic problem also. But, review of the literature yields contradictory results regarding the beneficial effect of splenectomy as a treatment of choice.[19,21] Because of this conflicting evidence splenectomy cannot be recommended as primary therapy in IPH. Deferoxamine and ethylenediaminetetra-acetic acid (EDTA)[22] have been tried in an attempt to increase iron excretion. The former was administered in the case reported herein but for only a few days before death. No beneficial results were noted.

Summary and Conclusions

A fatal case of IPH is presented in which the diagnosis was based on findings in gastric washings. A 2-year-old Negro boy had intermittent episodes of pulmonary hemorrhage terminating in death after a six month course. The literature was reviewed stressing the clinical and pathological features. The pathogenesis and treatment was discussed. The importance of this case is the use of gastric washings to make the diagnosis of IPH and the recommendation that they should be performed before a more traumatic procedure, such as, lung puncture or biopsy is considered.

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Monthly Surveillance Report

Cases of Certain Diseases Reported To the Michigan Department of Public Health For the Four-Week Period Ending January 28, 1972

MICHIGAN
DEPARTMENT
OF PUBLIC
HEALTH

	1972 This 4-Week Period	1971 Same 4-Week Period	1972 Total To Above Date	1971 Total Same Date	Total Cases for 1971
Rubella	104	156	104	156	2,955
Congenital Rubella Syndrome	0	0	0	0	1
Measles	164	53	164	53	2,659
Whooping Cough	13	4	13	4	139
Diphtheria	0	0	0	0	1
Mumps	344	1,090	344	1,090	10,748
Scarlet Fever & Strep Sore Throat	1,092	1,249	1,092	1,249	11,244
Tetanus	0	0	0	0	7
Poliomyelitis (paralytic)	0	0	0	0	0
Hepatitis	422	392	422	392	4,828
Salmonellosis (other than S. typhi)	64	55	64	55	691
Typhoid Fever (S. typhi)	0	0	0	0	10
Shigellosis	48	28	48	28	295
Aseptic Meningitis	6	10	6	10	239
Encephalitis	8	10	8	10	108
Meningococcic Meningitis	5	4	5	4	64
H. Influenza Meningitis	5	9	5	9	82
Tuberculosis	112	103	112	103	1,824
Syphilis	365	348	365	348	4,689
Gonorrhea	1,514	1,634	1,514	1,634	22,115

Information can be supplied by the local health department on the local incidence of disease.

Maurice Reizen, M.D., Director
Michigan Department of Public Health

Drug therapy problems

By Louis Depping, RPh
Ann Arbor

Q. Why is Tigan® injection contraindicated in children? (B.G., Detroit).

A. When Tigan® was originally approved only several hundred cases regarding parenteral use in children were included in the data. Therefore, the recommendation that Tigan® injectable not be used in children was not predicated on toxicity reports, but on the lack of statistical validity represented in the number of cases included in the original data.

Q. What are the effects of injecting propoxyphrene I.V. on the vein? (M.W., Ann Arbor).

A. I.V. administration of propoxyphene causes sclerosis of the vein within the first few injections. Therefore, abuse of the drug by this route would, of necessity, be limited.

Q. Why can't Valium® be mixed with other drugs or I.V. fluids? (M.S., Ann Arbor).

A. Valium® is insoluble in water. It has a special diluent composed of propylene glycol and absolute alcohol. If mixed with other diluents it will crystallize. In an I.V. fluid these crystals may not be visible to the naked eye. In addition to the obvious possible danger of injecting a crystal into the bloodstream, the crystals may settle to the bottom of the I.V. bottle. This would provide a bolus dose when the I.V. is first started. Cardiac arrest has been reported when Valium® has been injected intravenously too quickly.

Q. Can LSD be detected in the blood? (D.H., Ann Arbor).

A. A procedure has been developed but it is not suitable for routine application.

Q. Will tetracycline appear in a nursing mother's milk? (C.M., Ann Arbor).

A. Yes. 500 mg. given four times a day for three days produced levels in the milk of 1 mg. per liter of milk.

Q. What is the % of hexachlorophene in Dial soap? (M.C., Ann Arbor).

A. 0.75%.

Q. How many calories per milliliter of absolute alcohol? (P.F., Detroit).

A. 6 calories/ml.

Q. Can Sub Q Regitine® counteract Levophed® which has infiltrated? (F.A., Ann Arbor).

A. No. Regitine® pharmacologically counteracts Levophed® by alpha receptor blockade and not by physical or chemical antagonism.

Michigan authors

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Expanding the role of the office obstetric nurse

By F. W. Jeffries, MD, FACOG
Meredith Lentz, RN
Ann Arbor

For many years prenatal care has been cemented into a rigid schedule of doctor-patient appointments that are carefully followed by most practitioners. In many instances, both physicians and patients have believed that merely following this program insured good care.

However, it is now evident that the discriminating physician can identify the high-risk patient and tailor her care individually.[1,2] Likewise, it is time that we begin to modernize the established routine of our prenatal programs.

As recently reported in the A.C.O.G. Newsletter,[3] the College surveyed a nationwide sample of ob/gyn fellows on the use of allied health workers in maternity care. The report indicated that over half of the respondents clearly endorsed greater utilization of maternity nursing services. "Physicians' assistants were endorsed by the National Academy of Sciences' Board on Medicine as the quickest way to relieve the physician shortage. Calling for a 'major change in the organization of health care delivery,' the report says physicians' assistants can 'extend the arms, legs, and brains of the physician' by performing tasks that do not require the unique talents of the medical doctor."[4]

With these goals as our objective, we have taken a step towards this end by expanding the role of an obstetric nurse in a private practice setting.

Program

The program has been carried out in a two-man obstetric office in a city with a University Medical Center. The position has been filled by registered nurses with a special interest in obstetrics and several years' experience in this area. In preparation for this, the nurse was carefully oriented in our policies, and guidelines were developed for her to follow.

When a new patient calls, she is given an appointment with our obstetric nurse within the next seven days. She is told that a doctor's appointment will be scheduled by the nurse depending on the duration of her pregnancy and her individual needs. She is also instructed to bring a first-voided morning urine for a pregnancy test should it seem indicated. The following list summarizes the nurse's responsibilities at the time of the first office visit:

1. Obtaining a complete obstetric and medical history.
2. Obtaining blood for type, Rh, Hb, VDRL, antibody screen, and Rubella titer.
3. Checking weight, blood pressure, and urine.
4. Determination of pregnancy test on first-voided urine if indicated.
5. Providing a prescription for prenatal vitamins and iron.
6. Dispensing a prenatal instruction sheet and booklet.
7. Discussion of financial responsibility and insurance coverage.
8. Discussion of diet and exercise.
9. Discussion of available prenatal classes.
10. Scheduling of the first physician appointment.

The nurse averages thirty to forty-five minutes to complete these tasks. If, in her judgment, a problem may exist, an appointment is worked into the doctor's schedule that same day.

The second nursing visit is made at the beginning of the third trimester after she has seen the physician at monthly intervals through mid-pregnancy. This point in the pregnancy was chosen as the patient begins more frequent office visits at that time. Patients are informed that this visit will be used to present information relating to labor, delivery, and postpartum care. The nurse's responsibilities for this second visit include the following:

1. Discussion of hospital policies and hospital pre-registration procedures.

2. Routine rechecking of weight, blood pressure, and urine.
3. Rh titer is ordered when indicated.
4. Hemoglobin is rechecked and a prescription for additional iron is given if indicated.
5. Chest X-ray is ordered or tine skin test is done.
6. Plans for pediatric care are discussed.
7. Discussion of symptoms of early labor and when to call the doctor and when to go to the hospital.
8. Discussion of anesthesia for normal labor and delivery.

The time needed for this appointment varies greatly, depending on the number of the patient's questions, parity, and previous obstetric experiences.

Results

After the first two years of this program, we decided to evaluate its effectiveness in serving the patient. Over 500 obstetric patients began in the program during this period. Due to changes of address, abortions, and incomplete prenatal care, we were able to include only 400. From these we chose the first 200 survey sheets returned and completed for analysis. All subjects included in the study registered for all care in their first trimester and carried pregnancies to term, delivering live infants. Of these, 99 were primigravidas, 59 had one previous child, and 42 had delivered two or more. As the practice draws largely from a university community, 116 of the patients had completed two or more years of college and 73 had college degrees.

The 200 completed, returned, and evaluated survey forms gave the following answers to four questions asked:

1. Approval of initial nursing visit 170/200
2. Approval of second nursing visit 139/200
3. Approval of both visits as contributing to better understanding of her pregnancy 113/200
4. Number of patients who stated they were able to communicate some problems and questions with the nurse mose easily than with the doctor 68/200

The results were analyzed with regard to age, parity, and educational achievement. Neither increasing age nor education caused greater approval or disapproval of the program. However, as can be seen from the following table, parity was a factor. The woman having her first prenatal experience was more receptive.

Question	Primips Approval	Multips Approval
1	92%	76%
2	79%	55%
3	66%	46%
4	38%	26%

Discussion

The two basic aims of this program were to provide better obstetric care and to do so in a more effecient manner by increased utilization of the office nurse. We feel better care was provided by the program in the following ways:

1. The patient was seen sooner. By making an appointment with the obstetric nurse within one week of their call, patients were not forced to wait for an opening in the obstetrician's schedule. This avoids the need for patients to convince a busy secretary of their individual problems in an effort to get an early appointment with the doctor. Then, each woman is evaluated through a direct interview and the appointment with the doctor is made at the most reasonable time considering her needs and the schedule of the doctor.
2. The patient was given more time. Prenatal care can become terribly routine and repetitive to many obstetric practitioners. Because of this, preparations and explanations are often brushed over or even omitted. In order to give more time to the urgent or interesting problems, the prenatal visit is frequently rushed through. The obstetric nurse does not have these other pressures on her schedule and can plan adequate time for each visit with the patients.
3. The patients' prenatal instruction and advice was improved. With an enthusiastic nurse covering a specific checklist, errors and omissions were unquestionably reduced. Available prenatal classes in the community were recommended, tailoring the choice of the class to each individual's wants and previous experiences. Patients with unusual social or financial problems were informed of community resources. The patient desiring an abortion was given immediate attention to facilitate the earliest possible termination. Accomplishing these ends was obviously aided by the earlier availability of a nursing appointment plus the greater amount of time she had to spend with each patient.
4. Some patients could communicate with the obstetric nurse more easily than with the doctor. As can be seen from the survey, over 1/3 of the patients did feel this to be true. Frequently patients hesitate to ask the doctor questions they do not consider essential

because of his busy schedule and full waiting room. Often, this feeling does not inhibit them when talking with the nurse.

Efficiency in the delivery of prenatal care was improved in the following ways:

1. Physician time was saved. In a normal and uneventful pregnancy the second nursing visit completely replaced an appointment that had formerly been with the physician. Following the initial visit the physician need only review the history that has already been taken and organized. Also, throughout the pregnancy, patients' questions are more specific and meaningful after the nurse's presentation of information regarding hospital procedures, labor, anesthesia, delivery, and available pediatric care.
2. Having a single person responsible for these areas has reduced duplications and inconsistencies that occasionally occur when more than one doctor is involved in the prenatal care. A standard base of information is provided consistently to all patients, neutralizing some of the differences that invariably exist between obstetricians working together.
3. The two visits with the nurse not only lessen the questions on other prenatal visits, but reduce the phone calls to the office. And, with the obvious confidence placed in the nurse by the doctors, she is now able to answer a major percentage of these phone questions herself. This provides the patient with an immediate answer and again saves the doctor time previously spent returning a call.
4. Improved legibility of antepartum records has resulted. Although a minor point, the careful script of a nurse has certainly been an improvement in our records.

Since the completion of our survey, we have hired a nurse who not only sees the patients for the two nursing visits, but also assists the doctor at the time of the routine appointments. Initially, two separate nurses were used. With the increased contact between the nurse and the patients a much more trusting and friendly relationship seems to have been established. We feel this has further improved patient acceptance of the program. We are now finding that many patients call with questions and specifically ask for the obstetric nurse. Also, with increased patient acceptance of the program we now have the nurse see routine returning patients at any time the doctor is absent for emergencies or deliveries. At this time she measures the fundus and listens to the fetal heart tones, in addition to checking the weight, blood pressure, and urine. If all findings are normal, and the patient has no significant problems, an appointment is made at the time the next regular visit would have occurred if she had seen the doctor.

Finally, we have not noted any deterioration in the patient-physician relationship that is so important in a private obstetric practice. The physician sees our normal obstetric patients seven or eight times during her pregnancy, and it is thought this could be further reduced by one or two visits, as has been done in the Virginia Mason Clinic,[5] without undermining patient confidence and quality of care. As a program of this type becomes understood and widely used, it could easily be enlarged to the point that alternate visits could be with an obstetric nurse. The major challenge is to convince the possessive obstetrician to hire and train qualified personnel to perform more of his routine jobs, thus freeing him for more challenging and demanding tasks.

The following suggested immunization schedule is prepared for MICHIGAN MEDICINE by the Communicable Disease Control Division of the Michigan Department of Public Health.

Suggested Minimum Schedule For The Active Immunization Of Infants and Children[1]

2-3 months	1st dose DTP . . . OPV (Trivalent)[2]
4-6 weeks later	2nd dose DTP . . .
4-6 weeks later	3rd dose DTP . . . OPV (Trivalent)
12-24 months	DTP 4th dose (supporting OPV) (Trivalent)[3] Tuberculin test[4] Measles, Rubella and Mumps Vaccines (or combined MR or MMR)
5 years	DTP (Booster) OPV (Trivalent) Measles, Mumps or Rubella Vaccines (as indicated)
15 years	Td (adult booster) (every 10 years thereafter)
Over 6 Years of Age	(No Previous Inoculations) Td (adult) 2 doses not less than one month apart. Third dose (supporting) six months to one year later. OPV (Trivalent) **two doses** given at least eight weeks apart followed in one year with a **third dose.** Measles, Mumps or Rubella Vaccines as indicated

DTP = Diphtheria, tetanus, pertussis.
OPV = Oral polio vaccine (Trivalent).
MR = Measles, rubella (live, attenuated virus vaccine).
MMR = Measles, mumps, rubella (live attenuated virus vaccine).
Td = Tetanus, diphtheria (adult).

NOTE:
1. This schedule is meant to be a guide only and should be used, at the physician's discretion, after considering the individual needs of the patient.
2. Inactivated polio vaccine (Salk) either singly or in combinations with diphtheria, tetanus, and pertussis antigens are available from MDPH and may be substituted for attenuated live polio vaccine (Sabin). Consult package insert for recommended schedules.
3. Routine smallpox vaccination is not felt to be necessary at present to protect the public health. If primary vaccination is indicated, in the judgment of the physician, the second year of life is the optimum period for this procedure. Consult package insert for contraindications.
4. Depends on risk of exposure and prevalence of diseases in population groups. Future testing at physician's discretion.

The Stokes-Adams Syndrome:

Definition and Etiology

By Robert A. O'Rourke, MD
San Diego

The Stokes-Adams syndrome is defined as an abrupt, transient loss of consciousness due to a sudden but pronounced decrease in the cardiac output, which is caused by a sudden change in the heart rate or rhythm. This definition does not include vasovagal syncope or epilepsy although patients with Stokes-Adams syncope may have seizures during periods of cerebral ischemia. Although partial or complete heart block is usually present during asymptomatic periods, many arrhythmias may produce syncopal episodes with or without the presence of previously established complete heart block. "Arrhythmia-induced Syncope" is a more specific term and includes the primary cause of the decreased cerebral blood flow.

(First of a two-part series)

Clinical Features

The clinical manifestations of arrhythmia-induced syncope depend upon the duration and type of underlying arrhythmia as well as the status of the cerebral circulation. Symptoms of arrhythmia-induced syncope vary from slight faintness to loss of consciousness, with or without convulsions.

Characteristically, during the attack there is an initial pallor. Following resumption of the normal circulation there is usually a facial flush due to reactive hyperemia. The absence of an aura tends to separate seizures occurring during Stokes-Adams syncope from seizures of primary cerebral origin. Stokes-Adams seizures usually commence and terminate abruptly. The patient may resume a previous conversation or activity without being aware of the pause produced by the period of arrhythmia-induced cerebral ischemia. A slow or very rapid pulse during the period of unconsciousness points toward the correct diagnosis. Electrocardiographic monitoring during a syncopal episode demonstrates the responsible rhythm and makes appropriate therapy possible.

Etiology

Since most patients with arrhythmia-induced syncope have some impairment of atrioventricular (A-V) conduction either during or between attacks, the etiologies of Stokes-Adams syncope are often the causes of complete heart block.

Structural Lesions of the Heart. Approximately 7 percent of the cases of complete heart block in adults are congenital in etiology, with or without associated cardiac defects. Syncopal episodes complicating congenital heart block are uncommon but do occur and may necessitate pacemaker insertion.

Myocarditis of various etiologies may involve the conduction system, resulting in complete heart block and syncopal episodes. Diphtheria has long been known to be associated with conduction defects particularly complete heart block.

Heart block, occasionally with Stokes-Adams Syncope, has been reported during the course of connective tissue disease and in association with degenerative skeletal muscle and nervous system disorders. In valvular heart disease valve calcification or endocarditis may involve the conduction system and produce incomplete or complete heart block.

Acute myocardial infarction is complicated by complete heart block in approximately two to seven percent of cases. Complete heart block complicating inferior wall myocardial infarction usually proves to be transient and restoration of normal conduction occurs within two or three weeks. The conduction defect involves the A-V junctional tissue. When an anterior wall infarction is the cause of complete heart block the mortality rate is extremely high even with pacemaker insertion. In this situation the complete heart block is frequently due to extensive myocardial necrosis involving the right bundle and the two divisions of the left bundle (trifasicular block) rather than to a conduction defect in the A-V junction.

In a considerable number of patients no etiology can be established for complete heart block. Care-

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Doctor O'Rourke is with the Department of Medicine of the University of California at San Diego. His manuscript was prepared by the American Heart Association and made available to **Michigan Medicine** by the Michigan Heart Association.

ful pathological examination has shown that many such patients with heart block do not have extensive coronary artery disease but have areas of fibrosis involving the conduction system distal to the common bundle (trifasicular block), either alone or in association with scattered areas of fibrosis throughout the myocardium. In elderly people this has been attributed to "sclerosis of the left side of the cardiac skeleton" which presumably results from wear and tear due to the repeated pull of the contracting left ventricular musculature.

Primary and metastatic neoplastic disease, metabolic disease and infiltrative disorders of the myocardium may produce heart block. Complete heart block is a potential risk during corrective heart surgery, particularly during repair of ventricular septal defects. Surgical heart block frequently reverts to sinus rhythm within three to four weeks following operation. If it continues beyond this period a permanent pacemaker is usually inserted. Non-penetrating chest injury is an occasional cause of complete heart block.

Heart block has been reported in association with Reiter's Syndrome, amyloidosis, Pagets disease and sarcoidosis. The myocardium is involved in approximately 20 percent of autopsy proven cases of sarcoidosis. Conduction disturbances, Stokes-Adams syncope and sudden death are known to occur in sarcoidosis and this entity is an important consideration in the differential diagnosis of acquired complete heart block in the young adult.

Electrolyte Disorders. Potassium is the most important electrolyte in relation to A-V conduction. Isolated instances of advanced A-V block have occurred in patients during or following the administration of large doses of potassium salts. Hyperkalemia markedly decreases the ventricular rate in pre-existing heart block.

Acidosis depresses the ventricular pacemaker in complete heart block and may precipitate Stokes-Adams syncope. Alkalosis, hypokalemia and hypernatremia increase A-V conduction and may reverse heart block. However, alkalosis and hypokalemia may increase ventricular ectopic activity, leading to ventricular tachycardia or fibrillation.

Toxic Effect of Drugs. Digitalis is the drug most frequently responsible for producing complete heart block. Syncopal episodes are uncommon during heart block due to digitalis toxicity because the ectopic pacemaker frequently originates in A-V junctional tissue and the ventricular rate is faster than in complete heart block of other etiology. The supraventricular rhythm in these patients is often atrial fibrillation.

The antiarrhythmic agents, quinidine and procaineamide, depress the conduction system as well as pacemaker rhythmicity and are contraindicated in complete heart block. Diphenylhydantoin and Lidocaine may also depress the ectopic pacemaker and are therefore contraindicated in the presence of high degree A-V block. However, any of these antiarrhythmic drugs may be safely employed to suppress premature contractions in the presence of heart block if an adequately functioning electrical pacemaker has been inserted.

Bacteriuria screening of youngsters

By Mary L. Cretens, MD, MPH
Menominee

Urine screening of various population groups has gained enthusiastic response from some workers, while others feel that it is not worthwhile. However, there are several areas that have not been assessed fully. For the past two years our health department has been running extremely inexpensive projects on the age group that seldom have medical examinations—or at least, seldom have urine checks. The results of these findings are presented in this paper.

Over 25,000 deaths occur in the United States each year from urinary tract disease. Not counted in this number are deaths due to hypertensive renal disease. This number would bring the total annual death count to near 100,000.[1] The National Kidney Foundation estimated in 1966 that 3,300,000 Americans have unrecognized, undiagnosed disease of the urinary system.[1]

In young adults kidney problems are the commonest cause of loss of work time.[1] Bacteriuria acquired in childhood may be the reservoir of infection becoming evident in adult life. Chronic pyelonephritis has poor results even with good medical management.[2] Early detection, treatment, monitoring, and patient education may well have significant effects on a number of persons who otherwise might develop severe renal damage later in life.[3]

Girls are more prone to have urinary infections. Some estimates run approximately 30 girls to one boy.[2] Because of the higher incidence of urinary infections in girls, and due to economies involved, urine bacteria studies were not done on boys in either year of screening. The current year's screening program (1971) is described.

Materials and Methods

The study was conducted in two rural counties of Michigan (Delta and Menominee). Grades 3, 4, 5, and 8 were screened. The program was conducted by a registered nurse, assisted by a clerk technician, and volunteers made up of mothers, a few area nurses, and students. A permission-history type form was obtained from each parent whose child participated in the program. The form explained that oftentimes early urinary disease gave no symptoms. Answers filled in by parents included:

1. Physician to receive the report.
2. History of past urinary trouble.
3. Diabetes or kidney disease in close blood relatives.
4. Symptoms that may indicate urinary disease —(blood in urine, bedwetting, difficulty in holding urine, pain or burning on urination).
5. Use of bubble bath or detergent in child's bath water.

Each school in the two counties was visited and a mobile laboratory set up in a convenient place. All participating children were checked for albumen and glucose and most girls were checked for bacteria. (Late in the series, eighth grade girls were eliminated for bacteria screening because of problems connected with menstruation.)

Exton's reagent was used to check albumen and Test-Tape was used for screening glucose. Testuria kits were used for bacteria. The urine was incubated shortly after plating it. These results were read in 18 to 24 hours. 26 or more colonies were considered positive. Volunteer mothers were instructed in the procedure of catching a clean mid-stream specimen, and they, in turn, explained this to each youngster. Clean sterile test tubes (previously used in a blood drawing program) were used as urine containers. The girls were instructed to sit on the toilet backwards (facing the wall) to facilitate catching the specimen. Sputum cups (government surplus) were used as containers for the boys.

Those students whose studies were positive for albumen, glucose, or bacteria were referred back to the Health Department for a second screening. These second specimens were obtained under close supervision of the program nurse. If this second test was positive, the child was referred to the family physician for additional follow-up tests. The physician was requested to submit re-

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Doctor Cretens is director of the Delta-Menominee District Health Department. This screening program was sponsored by the district department and the Michigan Department of Public Health. Christine Gail Smith, RN, Escanaba, was project nurse.

sults of his follow-up examination to the Health Department.

Results

Combining the results of the two counties, 76% of the children enrolled in grades 3, 4, 5, and 8 participated. There were 1,989 boys and 1,820 girls screened for a total of 3,809. From these, there were 135 referred to the Health Department for rescreening and 118 returned to rescreening. Of these, 22 were referred to their physicians. Thirteen were reported as having disease by their physicians. A breakdown of the diagnoses included five infections, five albuminuria, one renal glycouria, one chronic renal disease.

Statistics on Urine Screening Program

	Boys	Girls	Total	% of Unit Above
Participants	1,989	1,820	3,809	76%*
Referrals to Health Dept.	10	125	135	3.5%
Returned to Rescreening	10	108	118	88%
Referred to MD	3	19	22	18.6%
New Cases Found ..	2(0.15%)	10(0.55%)	12	54.1%
Old Cases	0	1	1	8.3%

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* Of enrolled students

Discussion and Conclusions

The actual statistical yield was quite low. In studies done elsewhere approximately 1% of girls and 0.03% of boys were found positive for urinary tract disease. If these studies are continued all through school there would be a five-fold increase in these statistics.[2] Our results were higher in boys (0.15%) and lower in girls (0.55%). However, the boys and some of the girls were not screened for bacteria, so the results were not comparable.

In absolute numbers, however, there were 12 children found with previously unknown abnormalities on one or two rescreenings, plus the physician's examination. Some of the physicians did not repeat bacteria tests and very few did microscopic examinations of the urine on follow-up. This may have been the cause of missing a few actual cases of disease.

It was observed that cold weather and recent exercise increased positives for albumen. The girls did quite well in collecting clean specimens although no "prep" was used. Occasionally, a volunteer group would not be careful in giving the girls instructions and on those days the number of positive cultures would increase above the average number of positives. Repeat cultures eliminated unnecessary referrals.

The cost of the bacteriuria screening media was the biggest item of expense, especially when repeat tests were done. If the test for bacteria had not been carried out, 58% of the number referred in the program would have been referred on the basis of glucose and albumen. With the simple albumen-glucose urine screening, using volunteers, the cost for materials would amount to about two cents per child.

Many parents commented favorably on the program. Generally they expressed the fact that they did not realize urinary disease could be present without symptoms.

Summary

A urinary screening program was conducted by Delta-Menominee District Health Department on 3,809 school children in grades 3, 4, 5, and 8. 118 were rescreened and 22 referred to the family physician. At least 12 of these children were found to have persisting urinary disease from time of screening to diagnosis (one week to one month). Urine screening in the school is simple, low in cost, and has some educational merit. Over-referral is a problem unless rescreening is done.

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New registry of placental tissue handles 109 specimens

By Joseph R. Cipparone, MD, Chairman
Subcommittee on Placental Tissue Registry
MSMS Committee on Maternal and Perinatal Health

(Note: The MSMS Placental Tissue Registry was started in 1970 as another effort to further improve maternal and perinatal health. Here is a report of the Registry for 1971 from the chairman, a Lansing pathologist.)

From January 1, 1971 through December 31, 1971 a total of 109 placentas had been submitted to the registry from a variety of physicians in a number of different hospitals throughout the state (see below).

Only eight placentas were received in 1970 as submission of specimens did not begin until late November, 1970. The number of specimens is increasing as more physicians become aware of the merits of the registry. A gross and microscopic examination of each placenta was made and a report submitted to the attending physician. Some reports included recommendations to be made relative to the care of that patient or her infant. The registry is therefore both service- and research-oriented as statistical data is being kept on all gross and microscopic observations made.

The following hospitals have submitted specimens to the registry:

	HOSPITAL	LOCATION
1.	Emma L. Bixby	Adrian
2.	McPherson Community	Howell
3.	St. Mary's	Saginaw
4.	Mercy Hospital	Cadillac
5.	War Memorial	Sault Ste. Marie
6.	Kelsey Memorial	Lakeview
7.	Sparrow	Lansing
8.	Blodgett	Grand Rapids
9.	St. Francis	Escanaba
10.	Pennock	Hastings
11.	Ingham Medical	Lansing
12.	Burns Clinic	Petoskey
13.	Albion Community	Albion
14.	Bronson Methodist	Kalamazoo
15.	St. Lawrence	Lansing
16.	Mount Carmel Mercy	Detroit

General categories relative to the placentas include specimens from multiple births, configuration abnormalities (such as duplex, circumvallation), multiple congenital anomalies in the infant, toxemias of pregnancy, maternal conditions affecting pregnancy (such as severe heart disease), IUD devices with surrounding placental growth, drug ingestion in mothers (such as LSD), and a number of other miscellaneous conditions. In approximately one-half of the cases of specimens submitted to the registry, the placenta was associated with an infant death—hence the reason for submitting the specimen as to probable cause of death via placental abnormality, etc.

Cancer experts receive 55 requests to speak around state

"Hodgkin's Disease, Leukemia and Lymphoma," "Cancer Chemotherapy," "Introduction to Oncology," "Recent Uses of Chemotherapy," "Intra-adbominal Cancer," and "Care and Treatment of the Cancer Patient" are just a few of the titles of speeches presented to medical groups by doctors knowledgeable in the field of cancer. The lectures are part of the 1971-72 Professional Education Program of the Michigan Cancer Coordinating Committee.

Based on its success of the previous two years, the Professional Education Program, chaired by William Bromme, MD, of Grosse Pointe, was authorized by the Michigan Cancer Coordinating Committee to continue for 1971-72.

Invitations were sent in the spring of 1971 to administrators of MD and DO hospitals, as well as to secretaries of Michigan's component medical societies, component districts of the Michigan Dental Association and component societies of the Michigan Association of Osteopathic Physicians and Surgeons. Fifty-two replies were received indicating interest in arranging a meeting on a cancer subject.

Speakers participating in the program are: William Arnold, PhD, Detroit; Robert Kastenbaum, PhD, Detroit; R. Roderick Abbott, MD, Flint; M. R. Abell, MD, Ann Arbor; David G. Anderson, MD, Ann Arbor; James R. Borst, MD, Grand Rapids; Robert W. Brownlee, MD, Detroit; Frances E. Bull, MD, Ann Arbor; Max E. Dodds, MD, Flint; James A. Ferguson, MD, Grand Rapids; George S. Fisher, MD, Detroit; Charles Frey, MD, Ann Arbor; Willian J. Fuller, MD, Grand Rapids; Edward L. Moorhead II, MD, Grand Rapids; Robert M. O'Brien, MD, Detroit; Melvin L. Reed, MD, Detroit; Phillip B. Stott, MD, Kalamazoo; Lee B. Stevenson, MD, Detroit; Robert W. Talley, MD, Detroit; W. G. Tucker, MD, Kalamazoo; V. K. Vaitkevicius, MD, Detroit; Leo Zelkowitz, MD, Kalamazoo; James R. Hayward, DDS, MS, Ann Arbor; Robert B. Hoek, DDS, Grand Rapids; Nathaniel H. Rowe, DDS, MSD, Ann Arbor; Philip Adler, DO, Farmington; Norman W. Arends, DO, Flint; Michael DiMattie, DO, Bloomfield Hills; George E. Himes, DO, Flint; Michael L. Opipari, DO, Highland Park; and the Midwest Oncology Center at Borgess Hospital, Kalamazoo.

Perinatal Tips

By Paul M. Zavell, MD
Detroit

The following case from the files of the Wayne County Medical Society Perinatal Mortality Committee is presented as an aid in continuing education.

This was the sixth pregnancy of a 30 year-old gravida VI, Para IV white mother. In 1959, at age 19, with her first pregnancy, her blood type was reported as AB+. This was not rechecked as far as we can ascertain at any other time.

Her first three infants each had an uncomplicated pregnancy, delivery and perinatal course. However, her fourth infant after an uneventful pregnancy and delivery, was quite jaundiced in the first five days with indirect bilirubin reaching a total of 18mgm% and hemoglobin dropping to 13.0 gms. This was dismissed as "physiologic jaundice."

Two years ago the fifth pregnancy ended in a stillbirth at 35-36 weeks. No autopsy was done here.

This sixth pregnancy was uneventful until the 25th or 26th week when the mother noted cessation of movement. She consulted her doctor who confirmed that the infant was probably dead as no heart tones could be heard. Nothing further was done until three weeks later, when the mother went into labor and after 10 hours delivered a macerated stillborn. Because she had lost two infants in a row, the mother desired an autopsy.

The post mortem study of the infant and the placenta revealed definite evidence of hemolytic disease of the newborn. Following this the mother's serum was retested with a panel of known antigens and carried beyond the usual ABO to Rh typing. She was found to be AB Negative with Anti-D easily identified in her serum. Studies also showed the Indirect Coombs to be 1:16384!!

Perinatal Committee Comments

1. The Committee felt that the earlier infant findings of 18 mgm% bilirubin with a hemoglobin of 13.0 gm were not really compatible with "physiologic jaundice." They felt the pediatrician should have been clued that an unusual situation existed here and he should have suggested retesting of the mother's blood type.
2. Ideally, ABO Rh and Coombs tesing should be done with each pregnancy. But where necessary, at least Coombs test should be done.
3. Where an ABO setup is present it can be very helpful to get *both* an Indirect as well as a direct Coombs test.
4. Where there has been an unusual infant loss in a prior pregnancy, the obstetrician should order retesting of the mother's blood using a panel of known (common and rare) antigens.

Doctor Zavell is chairman, Neo-Natal and Hospital Care Committee, Michigan Chapter, A.A.P., and chairman, Perinatal Mortality Study Committee, Wayne County Medical Society.

These mentally retarded children practicing motor coordination skills are students at Lansing's Beekman Center. Operated by the Lansing School District, Beekman is one of an ever-increasing number of facilities operated by local school districts for the mentally retarded.

A new day dawns... for Michigan's mentally retarded

"To take the state out of the business of fostering a hopeless, unrewarding existence for those who are handicapped by mental retardation; to help them overcome their handicaps to whatever degree possible; and to return them to their communities, to familiar surroundings, to families, to friends where they can benefit from associations which will enhance their further development;

"To have educators provide training and education in the community where it should be, where it is provided for more fortunate children; to help parents and the community understand and accept the retarded; to avoid the deteriorating effects of neglect, impersonalization, and the feeling of rejection which is bound to be more prevalent in a large institution than in a home-like residence."

These are the aims of new policies adopted by the Michigan Department of Mental Health to help the mentally retarded, as explained by E. Gordon Yudashkin, MD, director. Those policies and the community medical practitioner's role in treating the retarded are described in the two articles on these pages, prepared by the MDMH.

Action at state and community levels indicates a new day is approaching for the mentally retarded residents of Michigan.

More of the mentally retarded are staying at home longer; more of them are leaving state institutions to return to community life; more of them are receiving training, finding jobs and are either partially or completely self-supporting.

Cold statistics illustrate the trend. For more than 70 years after the opening of Lapeer State Home in 1895 the number of mentally retarded in Michigan institutions increased every year. But during the last three years the number has decreased each year—today there are 2,000 fewer mentally retarded in state institutions than there were in January 1969.

New Department of Mental Health policies recently announced by E. Gordon Yudashkin, MD, director, are accelerating the downward trend in institution residents, the upward trend in community placements. To illustrate: institution census dropped nearly 10% (more than 1,000 patients) during 1971; community placements jumped more than 20%.

The "mandatory education" act passed by the Legislature in December (1971) will give impetus

At the Community Workshop in Flint, mentally retarded clients learn, among other things, the art of assembling fish nets. The workshop is operated by Genesee County Community Mental Health Services.

to this movement when school programs are funded to serve the mentally handicapped.

The Department policy is described by Dr. Yudashkin as follows:

"No admission will be accepted on the premise that it's for a lifetime.

"The idea now is to stop taking in new admissions who really don't need institutional care, rehabilitate and place in communities as many people as we possible can, retain all of the existing staff that we can, and close inadequate buildings. If we do this, we'll have enough staff in our institutions to treat retarded persons adequately.

Criteria for State Service Revised

"Except in emergency situations, state institutions for the retarded will not accept persons who are diagnosed as trainable or educable—they will be the primary responsibility of the community and public school districts.

"The waiting list is no longer meaningful as an indicator of actual need for facilities for the mentally retarded.

"Seniority on the list will no longer be the criteria for admission. We will take those in most critical need first, regardless of position on the list. Priority will be established by the emergency nature of each case.

"Immediate admission will be granted in cases where there is evidence a mentally retarded person is dangerous to himself or others.

"The philosophy, the policy and the programming for retarded persons will be geared to a concentrated effort to develop their functioning capabilities to whatever level possible. At that point, the person will be placed in the appropriate community setting.

"Residents in state institutions who require only nursing care will be placed, whenever possible, in nursing homes in their communities.

Community Responsibility Emphasized

"Communities will be expected to provide residential facilities and activity programs. State funds up to $15 per day per person are now available to match local funds on a 75%-25% basis, for programs under Act 54 which meet acceptable residential standards and provide activities such as recreation, sheltered workshops and training programs.

"Community residential facilities will be inspected frequently to ensure that safety, sanitation and physical comfort standards are being met and that operators are conducting designated daily activity programs.

"Preventative measures aimed at reduction of the incidence of mental retardation will receive high priority in the funding of community services.

"Day training programs for the severely retarded which were initiated by the Department of Mental Health and funded by the state will be continued under the Department of Education. The Department of Mental Health will give full support to Department of Education requests for funds to expand these programs.

School Programs Essential

"Community schools should develop programs for all levels of mental capabilities, not just for those who fit into the tight limitations of the norm. There is no reason to the concept that all those with an IQ under a certain level should be excluded from our schools and shipped off to a state institution.

"The community school should adapt to the child's need, not the child to some standard established for other children who are blessed with normal intelligence and are further advantaged by a system which excludes all others.

"Of course a mentally retarded child cannot compete on the same level as a normal child—to force him to do so is destructive. He needs to be educated in special ways. What we need to develop is a person who can cope with society, not necessarily a person who excells in reading, writing and arithmetic.

New Centers in Urban Areas

"The Department of Mental Health will continue its emphasis upon construction of mental retardation centers in major metropolican areas. These centers will be designed primarily to accommodate persons with under 30 intelligence quotient and the multiply handicapped. They will be programmed to provide outpatient, emergency and consultation services to schools and community agencies.

"As these centers are developed, old, uninhabitable buildings will be vacated, and the number of residents in larger state institutions will be reduced."

The community physician and the mentally retarded

By Homer F. Weir, MD
Plymouth

The role of the community physician, especially the family doctor, is of major significance in maintaining mentally retarded residents in the community. Homer F. Weir, MD, a pediatrician with many years of experience as a private practitioner and institution director presents in the following article information and suggestions which may be helpful to community physicians in dealing with the specific problems related to mental retardation. Dr. Weir is superintendent of Plymouth State Home and Training School.

Mental retardation is essentially a learning deficiency which originates during the development period and results from a variety of causes. It is not a single disease state.

Mental retardation exists in various degrees ranging from almost complete inadequacy to close to normal functioning. There is little or no relationship between diagnostic entities and prognosis for future achievement. For example, people with Down's syndrome usually are moderately retarded but may be severely retarded.

Early diagnosis of the mentally retarded, particularly those with multiple handicaps is essential to appropriate developmental planning. Research has demonstrated that the early years (0-5) are crucial to the development of the individual, socially, intellectually, emotionally and physically. Adequate assessment requires medical examination, psychological services, audiological examination, EEG, etc.

When acting upon the results of an early diagnosis, it is important to remember:

a. Tests available to determine mental capabilities in the very young are heavily affected by neuromotor or maturational factors and cannot be used to accurately predict the degree of eventual retardation. They only serve to suggest that program intervention is indicated.

b. Many studies have stressed the positive and negative effects of the physician's manner of approach to the retarded and his parents. (Deisher 1957; Olshansky 1963; Bryant and Heischer 1962; R. Koch 1959; and Weir and Kelley 1963.) Premature and inappropriate prognosis and rejection of the retarded by the psysician can be disastrous to the child, the parent and the doctor.

c. Program activity must follow diagnosis of retardation. If the family's community does not have appropriate programs, Regional Interagency Committees on Mental Retardation, local or state mental health agencies should be contacted by and be aided by the doctor in establishing programs readily accessible to the family.

Frequently valuable time is lost in providing appropriate medical treatment because the retarded child is unnecessarily sent to an institution. Decisions to place a retarded child out of his home are frequently complex, always require inputs other than medical information, and most importantly, must be made by the *parent,* not the doctor.

It is important not to base expectations of accomplishment of the mentally retarded solely on the results of psychological testing. While testing may set certain outside limits in achievement, there is substantial variation in what can be expected of people with similar I.Q.'s depending on training, instruction, supportive services, and attitudes of those in closest contact with the retarded person. This is true in the "normal" population and it is true with the retarded.

It is well to consider that such tests may include a variety of factors (age, anxiety, cultural background) and may not adequately measure individual capacity even in areas in which such tests are supposed to be the most accurate.

Mental retardation is not a problem which the physician can approach solely from a medical point of view. The role of the physician in approiate medical management of the mentally retarded must be supplemented by the services and advice of educators, social workers, and psychologists. While medical intervention designed to eliminate or minimize basic handicaps is essential, particularly with multiply handicapped children, successful overall treatment of the retarded necessarily involves other professional skills.

Sheltered workshops, like this one at Beekman Center, provide an opportunity for mentally retarded persons to learn job skills and get paid for their work, while they remain in the community. The adults above are sorting small auto parts.

Treatment of mental retardation cannot be limited to the afflicted person alone. The effects of a diagnosis of mental retardation on the child's family can often be devastating, and frequently, considerable supportive help must be provided. In some cases, psychiatric treatment is required to assist families in accepting the situation.

Most cases of mental retardation require no special medical services. Approximately 85% of the mentally retarded are only mildly retarded and require no more medical services than the normal person.

None of the mentally retarded present medical problems which cannot be managed, as are other health problems, within the health service delivery system. The important difference lies in professional, public and family attitudes toward the mentally retarded.

Physicians through their counseling, recommendations and treatment programs can exert a major influence in changing outmoded negative attitudes and in establishing necessary community programs for the retarded.

More attention should be devoted to mental retardation preventive programs. Programs designed to provide better pre-natal care and more adequate instruction can have a profound effect on the incidence of mental retardation.

Two specific conditions are not generally approached appropriately by many physicians primarily because of lack of current knowledge or because of cultural rejection of the retarded by the physician.

a. Mongolism—These babies should go home with parents. They should not be told that their "child will never walk, will never talk, will not live long, and will be severely retarded." None of these statements are true (Centerwall's Study). In contradistinction most mongols can become productive members of society.

b. Infants with meningomyelocele should be shunted. About 66% of such children provided with shunts will have normal intelligence. They are paralyzed, but lower extremity paralysis and other complications can be greatly alleviated by modern surgical and habilitation techniques allowing the meningomyelocele patient to become a highly contributory member of society.

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Your opinion please

MSMS asked the question:

In Governor William Milliken's 1972 budget message he recommended that the state deduct 3% from its payments to doctors for Medicaid services if the payments are made in 30 days. Would you accept this discount to be paid in 30 days? What is your reaction to this proposal?

These doctors replied:

By Brooker L. Masters, MD
MSMS Council Chairman

We are getting battered from the left and from the right.

It is not a new experience for physicians and organized medicine but it does seem to be coming at more frequent intervals.

The latest, as you have been informed via *Medigram,* is the Governor's health message recommendation that the state "save two million" by discounting Medicaid provider payments 3% if paid within 30 days.

The Council has adopted a four-step response to this proposal. My purpose here is not to discuss the four steps—I am sure you have read about them elsewhere—but to tell you my personal philosophy as Chairman that MSMS must continue to respond to such challenges in the strongest possible way. I believe that the MSMS members expect their state organization to speak for them in the most forceful possible manner. I can remember years ago when this was not MSMS policy—when we were afraid of hurting feelings or getting a poor public image.

It is also my personal conviction that MSMS has to continue its dialogue with people who don't necessarily agree with us, just as we did last month in presenting our views to the Democratic National Policy Council's Subcommittee on Health. I think we must make an opportunity to talk with the Republican Policy Council. I am not personally convinced that they fully understand the position of organized medicine or the practicing physician.

The many letters that I have received in the past few weeks convince me that the course that we are now taking, outlined above, is the one that the greatest number of members of MSMS believe in, too. I think I would only like to make it clear that I realize that whatever action MSMS takes must be responsible and not simply negative and reactionary.

Doctor Masters

Doctor Barton

Thomas A. Barton, MD
Howell

I have tried to think of a reason why I would be agreeable to accepting the above proposal and can only conclude that if everyone else who is being paid for rendering services or supplies were placed in the same situation, I would be agreeable. Secondly, I would feel much differently about this if the government were in a financial bind and had requested the medical profession's help on a temporary basis. Since neither of the above situations exist, the answer is an emphatic "no" with further amplification as follows:

The state government has clearly shown the medical profession what it thinks of us. For example, in the 1970 Medicaid budget for the three divisions involved, only the medical profession did not use up all of the allocated funds. The administrative division and the hospital division exceeded their budgetary allotments by many millions of dollars. It was, therefore, proposed in the 1971 budget that the hospital and administrative divisions be increased well over their 1970 allotments but that the medical profession be cut substantially below their 1970 allotment. Thus frugality, efficiency and honesty were penalized. This, I might add, was done with little fanfare or little criticism on the part of the government relative to the hospital and administrative divisions of the Medicaid program. Since the physicians continue to be efficient and economical in their operation, one may also infer that the medical profession has very little clout when it comes to budget preparation regarding payments to physicians as compared to hospitals and administrators of the medical programs. It is the present law of the land that the medical profession may grant 5.5% increase in salaries but is held to a 2.5% increase in fees. How this is to be done and the medical profession remain solvent, defies prudent financial operation of any office.

As a result of the above feelings, several ideas become quite clear in my mind:

(A) Neither the federal, state, nor local governments respect the medical profession as a whole. In the state, the doctors number approximately 7,800 people and this number of votes does not constitute a real liability inasmuch as they are not organized to bargain with any of the three units of government.

(B) The patient blames the medical profession, not the government, for the high cost of the hospital and doctor bills. The patient does not understand that it was the government that had formulated both the Medicare and Medicaid programs regardless of whether the medical profession was able to fulfill these programs or the government finance them. As a result of experience, it is apparent that the government cannot afford either program and that the doctors are now called upon to subsidize both programs.

(C) Since there is no one to bargain collectively for the doctors the government can cut the payments to the 75th percentile point as it has done in the Medicare program. There is no reason to expect that the state government, being further pinched financially, will not cut the Medicaid program payments to the 75th percentile point. Then to add insult to injury, they will discount the payments 3% because they are being paid by the government within 30 days.

(D) It might at first glance appear that the physicians might be able to counter the above measures by being non-participating (i.e., refusing care to Medicaid cases). However, as far as the Medicaid program is concerned, that action will continue to merely force the Medicaid beneficiary into the emergency room for treatment. The treatment there has been rendered by the doctor on call, who in order to maintain his staff membership has to take his call in rotation.

I realize there are other ways of covering the emergency rooms. However, the costs here have skyrocketed and will continue, not only because of non-participation but because of the increase in the number of people who are unable to pay their bills. The example that comes to mind here is the case of an acute otitis media who can be seen in my office and appropriate medication dispensed for $10.00 or less. In the hospital, the same patient will be charged $9.00 by the hospital for the use of the emergency room; the doctor on call will charge $10.00, and the druggist $5.00, for a total of $24.00. These payments will be made by the government with little or no quibbling; however, payment for the same treatment in the doctor's office often will be contested.

Doctor Berglund

(E) My final conclusion is that the medical profession had best organize itself as rapidly as possible into a bargaining unit in an effort to negotiate with any third party who wishes to purchase medical services from the medical profession. This can be done on a state or area basis. It may well be that the government is right and that the medical profession is too fat financially to recognize its peril until it is too late. It would appear that when the profession has its back up against the wall is the only time that it has tried to organize itself in order to negotiate with any unit of government.

In conclusion then, my course of action will be to try to have the medical profession organize either on an area or state basis, and to reject the government's payment with a 3% discount. As far as the federal program is concerned, I am non-participating and have chosen to let the patient argue with the government for the differential in payments.

Thomas R. Berglund, MD
Kalamazoo

Governor Milliken's proposal to deduct 3% from payments to doctors, for Medicaid services, if made within 30 days makes me mad!! It assumes that either we have so much money we won't miss a little or that we are already overcharging. It treats our work as *goods* rather than *services*. It once again singles out doctors "alone" and suggests *by implication,* that we are the source of the state's financial ills.

Medicaid is in trouble not because doctors have failed to make it work, but rather because the "government" has failed to budget enough money to pay for the medical care that is the *RIGHT* of our Medicaid recipients. Doctors are already bitter from last year's arbitrary reduction of payments by 10%. To further incense them by deducting 3% from already inadequate fees is revolting.

The *government,* both state and federal, has for years picked on doctors' fees. Every day we are beseiged to fill out Social Security forms for free, to examine people for vocational rehabilitation at rates far less than our regular patients pay, and we are "allowed" to care for a child under MCCC at degrading rates. This same "double standard" rate structure does not exist for everyone, however, as construction companies make huge profits on improperly built roads (and no 3% is deducted), plumbers, carpenters, bricklayers, etc., get union scale working for the state, and doctors alone are asked to accept a 3% discount.

Governor Milliken has failed to realize that there exists a crisis in regards to Medicaid in this state. Many doctors will not accept Medicaid patients. Those who do have some, will accept no new Medicaid patients. The reasons are obvious, inadequate rates are cut arbitrarily and now it is suggested that we accept a 3% discount just for being paid. The crisis may worsen—a few ghetto doctors care for only Medicaid patients. If their cost ratio is 50%, a 3% deduction in payment would be a drop in income of 6%. I would stop seeing Medicaid patients.

Governor Milliken *AND* the legislature have got to come to grips with the realization that people deserve good medical care and good medical care is not cheap.

I do not expect nor will I accept a 3% discount for cash by my patients any more than I will accept the same from the State of Michigan.

Robert M. Jesson, MD
Muskegon

My reaction to Governor Milliken's proposal to give a further discount to the State of Michigan on cash payments for Medicaid patients is one of disgust. It is a purely political gimmick designed to demonstrate that the governor is saving money, but at whose expense?

The State of Michigan already gives itself a large discount from usual, customary and reasonable fees (If I may use the jargon of Blue Shield) in payments for patients under Medicaid. While it is taking this discount at the expense of the medical profession and the patient, the state administration and legislature have given themselves raises far in excess of 3 percent, are pursuing plans for a billion dollar monstrosity of a capitol building, plus having spent hundreds of thousands in remodeling the present capitol building, and in general have demonstrated little sense of fiscal responsibility by making an effort to cut spending.

The Robin Hood concept of fees went out of date in the medical profession quite some time ago. State medicine wants to revive it. I can see no solution for this policy but to refrain from treating clients of state medicine.

Emergency cases should be accepted, of course, but the great majority of Medicaid people require care in other than emergency situations.

As politicians well know, such a policy would immediately create a conflict in the conscience of doctors who are for the most part motivated by the desire to help others. They have relied too long, however, on this psychological make-up, and we should refuse to continue under their terms because of a sense of duty. Why should our employed patient pay his fee from his own pocket while the wealthy state receives a substantial discount?

A drastic step must be taken to emphasize to the administrators of the Medicaid plan that any delivery of medical care will require the cooperation of the providers.

(The Grand Rapids Press, in a recent edition, carried this editorial on the governor's proposed 3% discount on Medicaid payments to physicians.)

Gov. Milliken's budget message to the Legislature included a peculiar provision. In the message the governor proposed that "as the state assumes responsibilities (from Blue Cross and Blue Shield) for invoice processing for Medicaid . . . all payments to providers (health care facilities) that are made within 30 days of receipt of billing be discounted by 3 percent." This, Milliken remarked, "Can reduce state costs by $2 million and provide an incentive to the department (of Social Services) to process claims in a timely manner."

Disregarding the incentive angle, which seems to suggest that state employes need some sort of bonus plan to assure their efficiency and devotion, we think that the governor's proposal poses an important question. It is simply this: What will the hospitals and nursing homes in Michigan do to make up that $2 million they will be owed for services already rendered Medicaid patients?

Does Gov. Milliken really believe that these institutions can absorb this "discount" to permit the state to realize a "savings?" This, it seems to us, is most unrealistic—for hospitals, too, must pay their bills.

Ultimately this 3 percent discount, or $2-million windfall, with which the state intends to reward itself for performing its job properly, will be borne by all patients using health care facilities in Michigan. This follows because what is actually a 3 percent cost to health care facilities doubtless will be reflected in higher room rates and service charges.

Furthermore, had Blue Cross and Blue Shield—the former carrier for the state's Medicaid program—been permitted to operate on Gov. Milliken's discount plan, it might have been able to show a $2-million "savings." For better or ill, however, Blue Cross and Blue Shield as a member of the private sector was expected to "pay its bills in full."

If adopted, the governor's plan could introduce an entirely new principle into the state's financial operations. Applying that principle in reverse, we are tempted to ask: Why shouldn't Michigan residents be permitted a similar 3 percent discount on state income taxes if they file returns within 30 days of receiving their W-2 forms?

Doctor Jesson

Doctor Moore

In 1971 the governor arbitrarily omitted payments to doctors because the legislature was unable or unwilling to agree upon a budget. One of the first groups to be hit by this malfeasance of the legislature was the welfare recipient, of which Medicaid is a small part. You will recall, however, that only 11 to 12 percent of the total in payments to doctors was omitted, and the remaining disbursement to other providers continued, as did the full salaries of the legislature and state employees.

The actions of the Governor are simply indicative of the trend of thinking towards regulation of physicians and show us the iron hand beneath the velvet glove. This issue should be fought out now while there is still some room for maneuver because of the fact that doctors do have private patients. I do not feel that the private patient should bear the brunt of decreased fees set by the state, and this is exactly what the Governor proposes.

Until the administration and legislature of the State of Michigan demonstrate a sense of fiscal responsibility in all their expenditures, I will personally object strongly to even a 3% discount as proposed. When sincere efforts are made by the state governing bodies to decrease expenditures of the state, then I believe he has the right to ask for a discount. Until that time, why should we be singled out?

The entire subject may be academic, however, as the state will have to process claims in 30 days to qualify if I understand it, and they don't even have the MMS computer to expedite matters.

Glenn E. Moore, MD
Flint

This proposal is another straw added to the camel's load. Last year, because of a state budgetary crisis, physicians were subjected to a 10% cut in medicaid fees, and though we protested loudly among ourselves, no concerted action was taken. And now a proposed 3% discount for prompt payment. One need not be clairvoyant to see where the first cuts will always be made as medicine comes into competition with police and fire departments, schools, and street sweepers for a place in the state budget.

Several provocative questions are raised by this recommendation. If a 3% discount is imposed for prompt payment, does it not logically follow that interest should be paid for delayed payments? What doctor accepting medicaid patients has not waited months for payment while red tape is unravelled? Is this maneuver legal? In both California and Kansas legal action was instituted when the state altered handling of federal funds, and it is reported that there were federal restrictions against such changes. What will happen to depressed area medicine? Is it not likely that the already inadequate supply of physicians in these areas will be adversely affected by such a ruling? Will the physicians with a small percentage of medicaid patients in their practice continue to care for them—or will they be gradually "weeded out" in favor of people who may be less difficult to care for and who have methods of payment which are less cumbersome and are not subject to the vicissitudes of state regulation and red tape? If the average doctor refuses to continue to care for these patients, in whatever number they occur in his practice, who will care for them?

Few among us would deny that we are rapidly approaching the time when most of our patients will expect third parties of one sort or another to handle all medical expenses. If it has been established that medicine will docilely accept a unilateral discounting of 3% on an already inadequate fee schedule, then I am sure we shall be considered easy prey by *all* third parties. Though many physicians may not be financially involved in medicaid, the time has come when we must all defend each segment of our profession as if we were being personally attacked. Unless we follow such a course, we shall soon *all* be the victims.

Another straw? Yes—one which should be vigorously refused. The precedent it would set is totally unacceptable. And yet, perhaps I am too dogmatic. Will I ever accept a 3% discount? Of course—on the same day the governor, the state legislators, the teachers, etc. accept a decreased paycheck for services honestly rendered—because the check arrives on payday.

Second in a series:

HMO in your future?

Here are terms of first state contract to provide medical services

By Herbert Mehler
Chief, Research and Analysis
Government Medical Programs

On Dec. 23 the Michigan Department of Social Services signed the first state contract to deliver medical services to a defined population. The contract provides services to Group I Medicaid eligibles, through the Model Neighborhood Comprehensive Health Program, Inc., of Detroit, and comes close to the HMO concept.

This article is the second in a series about HMOs or prepaid group practice plans. It will provide the MSMS membership with detailed information of various methods evolving to deliver medical services in Michigan.

Such information is important in order that the physician can determine the type of practice best suited to him and his patients.

The MSMS staff for research and analysis will make an on-site visit to the Center to seek additional information not available in the contract.

Following are the essentials in the demonstration contract:

Effective date: March 1, 1972 to February 28, 1973 unless terminated sooner.

Enrollees: Any person certified as eligible for Group I Medicaid services as authorized by law and amendments thereto. The total number of persons enrolled shall not exceed 10,000 during the contract and without regard to physical or mental condition, age, sex, national origin or race.

Service Area: Jefferson to Mt. Elliott—tip of Hamtramck to NYC RR to 16th & Grand River to Bagley (not business district) to Chrysler Freeway to Jefferson.

Hospitals: Harper, Grace (Central), Hutzel, Childrens' and Rehabilitation Institute.

Hospital Services: Room and board, general nursing services, operating room, anesthesia, drugs and medication, laboratory, X-ray, and casts. All medical, surgical, obstetrical, and related services, including outpatient services, are provided.

Authorized Subcontracts: Hospitals, professional medical physician corporation, marketing and enrollment, laboratory services, X-ray services, extended care facility and nursing homes, pharmacies, medical consultants, physician consultants, visiting nursing association, emergency ambulance services, social work agencies, medical laboratories, and marketing and enrollment—same to be accomplished through a subcontract with the Health Council of the Detroit Model Neighborhood, Inc., with said entity to have complete responsibility for this function.

Scope of Services

A. General and Specialty Medical and Related Health Services
   1. General
      (a) General and specialty medical-surgical-health services will be provided at the Model Neighborhood Comprehensive Health Center; hospitals; other facilities; or the patient's home as arranged by the MNCHP.
      (b) When required and where health services are not directly available by the

professional staff of the Center, such services are considered benefits and will be made available, by referral to qualified specialists outside the Center.

(c) A twenty-four hour emergency service is available through the Center at affiliated institutions when ordered by a MNCHP staff member.

2. In the Model Neighborhood Comprehensive Health Center

All preventive, diagnostic and treatment services provided by physicians and other professional staff members of the MNCHP without charge to the members.

Benefits include:

(a) Comprehensive health examinations and other screening tests.

(b) Immunizations as required by the needs of the enrollee.

(c) Laboratory and X-ray services including diagnostic and therapeutic radiological procedures such as radioisotopes, radiation treatment, electrocardiography and all other diagnostic services as required.

(d) Pre- and post-natal care.

(e) Eye examinations, refractions for glasses and eye glasses. (Maximum of one pair per year)

(f) Prescription drugs prescribed by MNCHP physicians provided in the Center and/or pharmacies located in Detroit Model Neighborhood.

(g) Emergency ambulance service to the MNCHP and other affiliated facilities when ordered by a MNCHP staff member.

(h) Pharmaceutical services including coordination of an individualized counseling service to members for drug related problems.

(i) Health education.

(j) Social work services.

(k) Rehabilitation services including physical, occupational and speech therapy.

(l) Nutritionist, dietetic and home economist services.

(m) Outpatient visits to psychiatrists upon referral.

(n) Prosthetic appliances when prescribed by a MNCHP physician.

3. In Hospital

All medical, surgical, obstetrical, and related health services, as indicated, in an affiliated hospital or other general hospital when ordered by a MNCHP physician.

4. At Home

Home care services by the Visiting Nurse Association and the Homemakers Service of Metropolitan Detroit when ordered by a physician or other professional employee of the MNCHP and including nutritionist service, home health aids, oxygen and the administration of oxygen.

5. In Extended Care Facilities

Up to 730 days of convalescent care when ordered by a MNCHP physician in an extended care facility or in a nursing home for each continuous period of confinement or for successive periods of confinement separated by less than 60 days. Where these periods are separated by more than 60 days, the 730 day period will be renewed. The 730 day period will be reduced by 2 days for every day of general hospitalization provided to the same patient.

B. Hospital Care

1. General

(a) Up to 365 days of care in a short-term general hospital with which the MNCHP is affiliated. Such care must be ordered by a MNCHP physician.

(b) Inpatient hospital services including semi-private room service; meals; general nursing services; operating room facilities, equipment and materials; delivery room facilities, equipment and materials; surgical dressings and casts; any equipment required while in hospital; X-ray, radium and radioisotopes for diagnosis and therapy; admission screening procedures; laboratory and other diagnostic services; anesthesia services; drugs, biologicals and related preparations; blood; and all other medically indicated hospital services rendered by hospital personnel.

2. Mental Illness and TB

Up to 90 days of care for mental illness or TB when such care is ordered by a MNCHP physician and when he deems it to be short term care. The benefit period is available for each continuous period of confinement or for successive periods of confinement separated by less than 60 days. Where these periods are separated by more than 60 days, the 90 day period will be renewed except that coverage will cease upon discharge and admittance to a hospital or institution specializing in the care of mental illness or TB.

3. Rehabilitation

   Up to 30 days of care in a rehabilitative institution.

Benefits provided by institutions and other providers not affiliated with the health program of the Detroit Model Neighborhood, Inc.

4. Emergency Care
   (a) When emergency care is urgently required; and when it is not practicable to use the Plan's emergency telephone service or to reach an affiliated facility; and when it is deemed to be a true emergency, the Health Plan will pay for such care in a non-affiliated facility or for care obtained by non-affiliated physicians, providing that the Health Plan is notified within 48 hours of the emergency.
   (b) Payment for emergency outpatient and inpatient hospital care; medical; and surgical care will be made by the Health Plan on the basis of reasonable costs and charges.
   (c) When a MNCHP physician deems it to be medically safe, a patient may be transferred to an affiliated institution. Cost of appropriate transportation in an authorized transfer of a patient to an affiliated facility will be made payable by the Health Plan. When a patient cannot be safely transferred to an affiliated facility the benefit will be extended until such transfer is practicable or until discharge.

5. Referral Care

   When a professional staff member of the MNCHP refers a patient for special treatment or diagnosis to qualified specialists and institutions not affiliated with the MNCHP, these services are considered benefits as though they were provided at the MNCHP or affiliated institutions.

Exclusions

1. Non-emergency services obtained through doctors and/or institutions which are not formally affiliated with the Health Plan of the Detroit Model Neighborhood.

2. Long-term hospitalization beyond that specifically provided for in the Agreement.

3. Medical and/or surgical services considered to be experimental in nature.

4. Dental care, except for oral surgery when ordered by a MNCHP physician.

5. Cosmetic surgery.

6. Private duty nursing, except when ordered by a MNCHP physician.

Compensation Proposed

Monthly per person payments by category

Old Age Assistance	(OAA)	$ 67.20
Aid to the Disabled	(AD)	104.58
Aid to the Blind	(AB)	47.25
Aid to Families Dependent Children	(AFDC)	17.46

For the Health Care Benefit package as detailed, not including the additional benefit categories of Rehabilitative services for drug addiction; Rehabilitative services for alcoholism not Dental care.

State's takeover of Medicaid soon underway

On April 1 the Michigan Department of Social Services plans to begin taking over fiscal intermediary functions for the state's Medicaid program, according to its own time table.

The Social Services Department will first begin administering ambulance services payments, with pharmaceutical payments to follow. Physicians are scheduled for state-handled reimbursement about Aug. 1. Hospitals and nursing homes will be last.

A pilot program is planned in a portion of the state to determine the difficulties that may be encountered when the state takes over physician services.

Certain key members to staff the Social Services Department's new operations now are on the scene, most particularly Paul Allen, director of the Bureau of Management and Information Systems. Mr. Allen is a retired naval officer with extensive experience in computers and information systems.

Other high-level personnel have been hired in bill review and client information systems projects. Implementation of the computerized program in the Department of Social Services will require more than 300 more people, although all this will not be directly attributable to the Medicaid program.

In the meantime, the Social Services Department is establishing liaison with MSMS and the Michigan Association of Osteopathic Physicians and Surgeons to discuss a fee schedule. J. K. Altland, MD, medical director of the department, is in charge of this phase of the program.

Details of the administrative change-over, first announced Oct. 13 by Bernard Houston, director, Social Services Department, have been explained to all members of The MSMS Council in a letter written by Chairman Brooker L. Masters, MD, Fremont.

Medicredit's advantage: it's ready to go, AMA testifies

By Donald N. Sweeny, Jr., MD
Chairman, Michigan Delegation to AMA

"Build on the very real strength that now exists."

That advice was given recently by the AMA in testimony before the House Ways and Means Committee in Washington on the national health insurance proposals.

Few MSMS members realize how often the AMA appears before Congressional Study Committees to represent physicians of our nation.

The AMA in these appearances on the national insurance issue urges adoption of Medicredit as a national health insurance proposal that "can be put into operation now."

AMA officials oppose the various programs that would not build upon present strengths.

Recently Max H. Parrott, MD, chairman, AMA Board of Trustees, explained to the congressional committee:

"We have a medical system with impressive accomplishments, a system that is flexible and innovative, a system responsive to the need for change and improvement. In whatever action this committee chooses to take the AMA strongly urges that you build on the very real strength that now exists."

Doctor Parrott drew the attention of the committee to many achievements in American medicine, saying, "Those who criticize our system of medicine imply that it is static and must be replaced. Let me call your attention to some of the salient accomplishments of our pluralistic medical system. Accomplishments that are obscured in the radical chic, by a disaster lobby which stridently proclaims a need for revolutionary change."

Doctor Sweeny

Doctor Parrott continued:

"Probably our highest achievement is in the quality of medical care in this country. The world standard of medicine is here in this country. American medical schools produce men and women with the best medical education there is. Our technology is unsurpassed."

Doctor Parrott cited the 25 per cent drop in the nation's infant mortality rate in the last decade and the steady growth of life expectancy in the U.S. as evidence "that American medicine—our pluralistic, evolving, pragmatic system—is changing things for the better, that we *are* making progress."

American medical schools, Doctor Parrott noted, have increased from 89 in 1967 to 108 this year and first-year enrollment has grown from 9,000 to 12,000 students.

Organized medicine has also undertaken initiatives to bring medical costs under control, the AMA officer told the committee. This is being accomplished mainly through medical society foundations, based on the concept of peer review, which screen hospital admissions and review procedures.

The AMA has been underlining in its work on Capitol Hill that, "Medicredit avoids the mistake inherent in proposals such as H.R. 22 (the Kennedy-Labor bill), which would lock medicine into a rigid, monolithic, no choice, bureaucratic system before there is any real evidence that it would make things better," he said.

In contrast to H.R. 22, Medicredit would build upon outstanding accomplishments of American medicine "which has shown a capability of being the best in the world."

"And it can be put into operation now. It has no dependence on untried theory or dubious economies. It does not require an unreasonable expenditure of federal dollars and it does not jeopardize the funding of other vitally necessary programs to improve the nation's health. It places emphasis on greater financial support for persons needing this assistance. It does not create an unreasonable, unrealistic and burdensome administrative bureaucracy."

The AMA Medicredit proposal has 160 sponsors in Congress.

Campbell's Soups...
wide variety...for limited appetites

Many people lose interest in food as they grow older. Some of them are fussy eaters—with only a few favorite foods. Others become indifferent to foods—because planning and preparing meals becomes a chore. Here Campbell's Soups can help —for these four very good reasons:

Appeal With a variety of tastes, textures, aromas, and colors, Campbell's Soups can add interest and appetite appeal. And they're easy to eat—ingredients are tender, bite-size. Many patients on special diets will find soups they can enjoy among the more than 50 different varieties available.

Campbell's
CONDENSED
SOUP

Nourishment Campbell's Soups contain selected meats and sea foods, best garden vegetables—carefully processed to help retain their natural flavors and nutritive values.

Convenience Within 4 minutes a bowl of delicious soup is heated and ready to eat.

Economy Campbell's Soups are inexpensive—an important consideration to those whose budgets are limited.

Recommend Campbell's Soups . . . and, of course, enjoy them yourself. Remember, *there's a soup for almost every patient and diet . . . and for every meal.*

Break the ulcer circuit to hyperacidity, hypermotility and ulcer pain.

Pro-Banthīne®
propantheline bromide
A Relief Factor in Peptic Ulcer

Worry, frustration, job pressure—all set up excessive vagal currents in patients with peptic ulcer.

Pro-Banthīne "insulates" the stomach, the duodenum and the lower intestinal tract—the sites where these destructive currents take their toll.

This "insulation" helps block excessive enteric activity and acidity, thus helping to provide the proper environment for the healing of peptic ulcers.

It's nice to know that Pro-Banthīne provides this protection at a dosage that causes little or no discomfort and that, unlike ataractic agents, Pro-Banthīne does not cloud the patient's awareness or thought processes.

By moderating excessive vagal currents Pro-Banthīne relieves spasm, acid burn and pain. By reducing gastric motility Pro-Banthīne also prolongs the activity of antacids.

Indications: Peptic ulcer, gastroenteritis, pylorospasm, biliary dyskinesia, functional hypermotility and irritable colon.

Contraindications: Glaucoma, severe cardiac disease.

Precautions: Since varying degrees of urinary hesitancy may occur in elderly men with prostatic hypertrophy, this should be watched for in such patients until they have gained some experience with the drug. Although never reported, theoretically a curare-like action may occur with possible loss of voluntary muscle control. Such patients should receive prompt and continuing artificial respiration until the drug effect has been exhausted.

Side Effects: The more common side effects, in order of incidence, are xerostomia, mydriasis, hesitancy of urination and gastric fullness.

Dosage: The maximal tolerated dosage is usually the most effective. For most adult patients this will be four to six 15-mg. tablets daily in divided doses. In severe conditions as many as two tablets four to six times daily may be required. Pro-Banthīne is supplied as tablets of 15 mg., as prolonged-acting tablets of 30 mg. and, for parenteral use, as serum-type vials of 30 mg. The parenteral dose should be adjusted to the patient's requirement and may be up to 30 mg. or more every six hours, intramuscularly or intravenously.

SEARLE *Research in the Service of Medicine*
Distributed by G. D. Searle & Co., P. O. Box 5110, Chicago, Illinois 60680

Helps control the underlying problem–anxiety

Miltown®
(meprobamate)
when reassurance is not enough

Indications: Relief of anxiety and tension; adjunctively in various disease states in which anxiety and tension are manifested; and to promote sleep in anxious, tense patients.
Contraindications: Acute intermittent porphyria and allergic or idiosyncratic reactions to meprobamate or related compounds such as carisoprodol, mebutamate, tybamate, carbromal.
Warnings: *Drug Dependence:* Physical and psychological dependence and abuse have occurred. Chronic intoxication, from prolonged use and usually greater than recommended doses, leads to ataxia, slurred speech, vertigo. Carefully supervise dose and amounts prescribed, and avoid prolonged use, especially in alcoholics and addiction-prone persons. Sudden withdrawal after prolonged and excessive use may precipitate recurrence of pre-existing symptoms (e.g., anxiety, anorexia, insomnia) or withdrawal reactions (e.g., vomiting, ataxia, tremors, muscle twitching, confusional states, hallucinosis; rarely convulsive seizures, more likely in persons with CNS damage or pre-existent or latent convulsive disorders). Therefore, reduce dosage gradually (1-2 weeks) or substitute a short-acting barbiturate, than gradually withdraw. *Potentially Hazardous Tasks:* Driving a motor vehicle or operating machinery. *Additive Effects:* Possible additive effects between meprobamate, alcohol, and other CNS depressants or psychotropic drugs. *Pregnancy and Lactation:* Safe use not established; weigh potential benefits against potential hazards in pregnancy, nursing mothers, or women of childbearing potential. Animal data at five times the maximum recommended human dose show reduction in litter size due to resorption. Meprobamate appears in umbilical cord blood at or near maternal plasma levels, and in breast milk at levels 2-4 times that of maternal plasma. *Children Under Six:* Drug not recommended.
Precautions: To avoid oversedation, use lowest effective dose, particularly in elderly and/or debilitated patients. Consider possibility of suicide attempts; dispense least amount of drug feasible at any one time. To avoid excess accumulation, use caution in patients with compromised liver or kidney function. Meprobamate may precipitate seizures in epileptics.
Adverse Reactions: *Central Nervous System:* Drowsiness, ataxia, dizziness, slurred speech, headache, vertigo, weakness, paresthesias, impairment of visual accommodation, euphoria, overstimulation, paradoxical excitement, fast EEG activity. *Gastrointestinal:* Nausea, vomiting, diarrhea. *Cardiovascular:* Palpitations, tachycardia, various forms of arrhythmia, transient ECG changes, syncope; also, hypotensive crises (including one fatal case). *Allergic or Idiosyncratic:* Usually after 1-4 doses. Milder reactions: itchy, urticarial, or erythematous maculopapular rash (generalized or confined to groin). Others: leukopenia, acute nonthrombocytopenic purpura, petechiae, ecchymoses, eosinophilia, peripheral edema, adenopathy, fever, fixed drug eruption with cross reaction to carisoprodol, and cross sensitivity between meprobamate/mebutamate and meprobamate/carbromal. More severe, rare hypersensitivity: hyperpyrexia, chills, angioneurotic edema, bronchospasm, oliguria, anuria, anaphylaxis, erythema multiforme, exfoliative dermatitis, stomatitis, proctitis, Stevens-Johnson syndrome; bullous dermatitis (one fatal case after meprobamate plus prednisolone). Stop drug, treat symptomatically (e.g., possible use of epinephrine, antihistamines, and in severe cases corticosteroids). *Hematologic:* Agranulocytosis and aplastic anemia (rarely fatal), but no causal relationship established. Rarely, thrombocytopenic purpura. *Other:* Exacerbation of porphyric symptoms.
Usual Adult Dosage: 1200 to 1600 mg daily, in three or four divided doses; doses above 2400 mg daily not recommended.
Overdosage: Suicidal attempts with meprobamate, alone or with alcohol or other CNS depressants or psychotropic drugs, have produced drowsiness, lethargy, stupor, ataxia, coma, shock, vasomotor and respiratory collapse, and death. Empty stomach, treat symptomatically; cautiously give respiratory assistance, CNS stimulants, pressor agents as needed. Meprobamate is metabolized in the liver and excreted by the kidney. Diuresis and dialysis have been used successfully. Carefully monitor urinary output; avoid overhydration; observe for possible relapse due to incomplete gastric emptying and delayed absorption. REV. 10/71

Before prescribing, consult package circular or latest PDR information.

WALLACE PHARMACEUTICALS
Cranbury, N.J. 08512

SYNTHROID
T4

RADAR
AHEAD

HISTORICAL
MARKER

T_4 IS THE PREDICTABLE HORMONE BECAUSE IT LOVES PROTEIN.

SYNTHROID® (sodium levothyroxine) is pure synthetic T_4, the major circulating thyroid hormone. It is reliable to use because of its affinity for protein-binding sites in the blood. T_3 is more fickle. Sometimes it binds. Sometimes it doesn't. T_4 more *predictably* binds to protein.

Synthroid®
(sodium levothyroxine)

ALL THYROID-FUNCTION TESTS ARE USEFUL IN MONITORING SYNTHROID THERAPY.

No calculations are needed, test interpretation is simple.

Any of the commonly used T_4 thyroid function tests (P.B.I., T_4 By Column, Murphy-Pattee, Free Thyroxine) are useful in monitoring patients on T_4 because they *all* measure T_4. Patients on SYNTHROID are thereby easy to monitor because their results will fall within predictable, elevated test ranges. Of course, clinical assessment is the best criterion of the thyroid status of the drug-treated patient.

TWO GOOD REASONS WHY THE ROAD TO NORMALIZED THYROID STATUS IS SO SMOOTH FOR THE SYNTHROID PATIENT.

(1) The onset of action of T_4 is gradual. It has a long in vivo "half-life" of over six days. (Occasional missed doses or accidental double-doses are of less concern because of this factor)[1]; (2) since SYNTHROID contains only T_4, the potential for metabolic surges traceable to more potent iodides (T_3) is eliminated.

TEST	HYPOTHYROID	SYNTHROID THERAPEUTIC NORMAL
P.B.I.	Less than 4 mcg %	6-10 mcg %
T_4 By Column	Less than 3 mcg %	7-9 mcg %
T_3 (Resin)	Less than 25%	27-35%
T_3 (Red Cell)	Less than 11%	11.5-18%
Free Thyroxine	Less than 0.7 nanograms %	0.7-2.5 nanograms %
Murphy-Pattee	Less than 2.9 mcg %	4-11 mcg %

Choose the Smooth Road

...to thyroid replacement therapy

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[1] Latiolais, C. J., and Berry, C. C.: Misuse of Prescription Medications by Outpatients, *Drug Intelligence & Clin. Pharm.* 3:270-7, 1969.

HY DOES SYNTHROID ST LESS THAN NTHETIC DRUGS NTAINING T_3?

y simple. T_3 costs more to make thetically than does T_4. So it is nomically necessary for a thetic thyroid medication taining T_3 to cost more than containing T_4 alone. Synthetic nbinations cost patients nearly more than SYNTHROID[3] ause the T_3 costs more to start ; also there is the additional ense of formulating a tablet taining two active ingredients.

erican Druggist BLUEBOOK, March, 1971.

MERGING
TRAFFIC

KNOWLEDGE OF THE '70's CHALLENGES CUSTOMS CONCERNING DESICCATED THYROID DRUGS.

In the past, desiccated thyroid produced from animal glands was considered "good, and cheap." We now know that improved products are available and the price difference has narrowed to the point of being inconsequential. (SYNTHROID, for instance, costs patients about a penny a day more than brands of desiccated thyroid.)

What does this additional $3.65 a year buy the patient? Quite a bit in terms of quality, reliability and service.

SWITCHING PATIENTS TO SYNTHROID IS EASY.

Switching present patients to SYNTHROID (or starting new ones) is a simple matter. SYNTHROID is available in the widest range of dosage strengths of any thyroid drug. Seven scored, color-coded tablet strengths are available plus a lyophilized injectable form for emergency or postoperative uses.

RESPONSE, RELIABILITY, SERVICE—COMPARISON OF FIVE PARAMETERS

ARAMETERS	DESICCATED THYROID U.S.P.	SYNTHROID® (sodium levothyroxine)
OURCE OF HORMONE	Animal glands (swine, sheep, cows). Hormone content of glands and ratio of T_3-T_4 varies by type of animal, season in which gland is harvested, and diet of animal.[1,2,3,4,5]	Synthetically derived pure crystalline hormone. Because no animal protein is present, no objectionable odor occurs upon aging.
ENERAL ASSAY TECHNIQUE	"Its major disadvantage is inadequate standardization of hormonal content."[8]	Unlike desiccated thyroid U.S.P., thyroxine does not require biologic standardization to establish its potency.[2,6] Crystalline T_4 is used. Purity is verified by paper chromatography. Content of tablets is standardized by weight.
LINICAL RESPONSE	"T_3 and T_4 ratio varies according to gland source. Fluctuations in response can occur. Potency can vary."[3]	"Sodium levothyroxine has been extensively used with satisfaction and is widely held to be superior to (desiccated) thyroid."[7] "There are well documented examples of patients who failed to respond satisfactorily to desiccated thyroid but subsequently responded to (sodium-l) thyroxine."[4]
REDICTABILITY	Failure of thyroid U.S.P. treated patients to show clinical improvement and/or lack of correlation in clinical findings to thyroid function test results has been frequently discussed in the literature.[8,9,10,11,12,13,14,15,16] Regardless of which factor or factors accounts for this phenomenon the fact remains that discrepancies do occur.	Test results predictably elevated. ". . . oral potency of this material is attested to by a uniformly good clinical response corroborated by a prompt and sustained increase in the serum PBI levels."[16]

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See next pages for prescribing information.

REST
AREA
1/2 MILE

PATIENTS CAN BE SUCCESSFULLY MAINTAINED ON A DRUG CONTAINING THYROXINE ALONE.

Thyroxine (T_4) is, as you know, the major circulating hormone produced by the thyroid gland. T_3 is also produced, in smaller amounts, and is active at the cellular level. For years it has been a working hypothesis among endocrinologists that T_4 is converted by the body to T_3. In 1970 this process, called "deiodination," was demonstrated by Braverman, Ingbar, and Sterling[2]. T_4 does convert to T_3, though the precise quantities are still being studied.

The conversion has been clinically demonstrated during the administration of T_4 to athyrotic patients. Their thyroid status is normalized on SYNTHROID alone, yet the presence of T_3 in these patients has been clearly shown.

CONSIDERATE LONG-TERM THERAPY FOR THE PATIENT.

Predictable patient response, of course, is more important than price. You do get complete clinical response with the single-entity synthetic, SYNTHROID. And, at a reasonable cost to the patient. In some short term situations, T_3 drugs can be useful but, in long term therapy, the smooth road provided by SYNTHROID may be the better route.

SYNTHROID, with its smooth road to complete thyroid replacement therapy, has been selected for more patients in the United States and Canada than any other brand of thyroid medication.

AS WITH ANY THYROID PREPARATION, CAUTIOUS OBSERVATION OF TH PATIENT DURING TH BEGINNING OF THERAPY WILL ALER THE PHYSICIAN TO ANY UNTOWARD EFFECTS.

Side effects, when they do occu
are related to excessive dosage
Caution should be exercised in
administering the drug to patien
with cardiovascular disease. Re
the accompanying prescribing
information for additional data
write Flint Laboratories.

Choose the Smooth Road ...to thyroid replacement therapy

0.05 mg. 0.1 mg. 0.15 mg. 0.2 mg.

FREE TAB-MINDER medicati
dispensers—color-coded in 4 do
age strengths—get patients off
a good start and encourage re
ular habit patterns. Contain fo
4-weeks' supply of SYNTHRO
and are reusable for maintenan
dosage.

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APPROXIMATE DOSAGE EQUIVALENTS*

			Animal Gland		
CYTOMEL (Sodium liothyronine) Synthetic T_3	EUTHROID** (Liotrix) Synthetic T_3-T_4	THYROLAR*** (Liotrix) Synthetic T_3-T_4	Desiccated (Thyroid, USP) Cow, sheep or hog thyroid	PROLOID (thyroglobulin) Frozen hog thyroid	SYNTHROID (Sodium levothyroxine) Synthetic T_4
Unscored 5 mcg.	N.A.	N.A.	unscored ¼ gr.	¼ gr.	0.025 mg.
N.A.	½	½	unscored ½ gr.	½ gr.	0.05 mg.
25 mcg.	1	1	unscored 1 gr.	1 gr.	0.1 mg.
N.A.	N.A.	N.A.	N.A.	1½ gr.	0.15 mg.
50 mcg.	2	2	unscored 2 gr.	2 gr.	0.2 mg.
N.A.	3	3	unscored 3 gr.	3 gr.	0.3 mg.
N.A.	N.A.	N.A.	unscored 5 gr.	5 gr.	0.5 mg.
N.A.	N.A.	N.A.	N.A.	N.A.	Injectable 500 mcg.

N.A. = Not Available Commercially

*Equivalents shown are chemical, and do not take into consideration individual patient variables. Clinical effect is approximate and should be monitored when converting a patient to SYNTHROID. This is particularly important in patients previously on desiccated thyroid. In these patients, lower doses of SYNTHROID may produce the same metabolic effect.

**Euthroid (#1 tablet) contains 60 mcg. of T_4 and 15 mcg. of T_3.

**Thyrolar (#1 tablet) contains 50 mcg. of T_4 and 12.5 mcg. of T_3.

Synthroid®
(sodium levothyroxine)

Indications: SYNTHROID (sodium levothyroxine) is specific replacement therapy for diminished or absent thyroid function resulting from primary or secondary atrophy of the gland, congenital defect, surgery, excessive radiation, or antithyroid drugs. Indications for SYNTHROID (sodium levothyroxine) **Tablets** include myxedema, hypothyroidism without myxedema, hypothyroidism in pregnancy, pediatric and geriatric hypothyroidism, hypopituitary hypothyroidism, simple (nontoxic) goiter, and reproductive disorders associated with hypothyroidism. SYNTHROID (sodium levothyroxine) **for Injection** is indicated for intravenous use in myxedematous coma and other thyroid dysfunctions where rapid replacement of the hormone is required. The injection is also indicated for intramuscular use in cases where the oral route is suspect or contraindicated due to existing conditions or to absorption defects, and when a rapid onset of effect is not desired.

Precautions: As with other thyroid preparations, an overdosage may cause diarrhea or cramps, nervousness, tremors, tachycardia, vomiting and continued weight loss. These effects may begin after four or five days or may not become apparent for one to three weeks. Patients receiving the drug should be observed closely for signs of thyrotoxicosis. If indications of overdosage appear, discontinue medication for 2-6 days, then resume at a lower dosage level. In patients with diabetes mellitus, careful observations should be made for changes in insulin or other antidiabetic drug dosage requirements. If hypothyroidism is accompanied by adrenal insufficiency, as Addison's Disease (chronic subcortical insufficiency), Simmonds's Disease (panhypopituitarism) or Cushing's syndrome (hyperadrenalism), these dysfunctions must be corrected prior to and during SYNTHROID (sodium levothyroxine) administration. The drug should be administered with caution to patients with cardiovascular disease; development of chest pains or other aggravations of cardiovascular disease requires a reduction in dosage.

Contraindications: Thyrotoxicosis, acute myocardial infarction. **Side effects:** The effects of SYNTHROID (sodium levothyroxine) therapy are slow in being manifested. Side effects, when they do occur, are secondary to increased rates of body metabolism; sweating, heart palpitations with or without pain, leg cramps, and weight loss. Diarrhea, vomiting, and nervousness have also been observed. Myxedematous patients with heart disease have died from abrupt increases in dosage of thyroid drugs. Careful observation of the patient during the beginning of any thyroid therapy will alert the physician to any untoward effects.

In most cases with side effects, a reduction of dosage followed by a more gradual adjustment upward will result in a more accurate indication of the patient's dosage requirements without the appearance of side effects.

Dosage and Administration: The activity of a 0.1 mg. SYNTHROID (sodium levothyroxine) TABLET is equivalent to approximately one grain thyroid, U.S.P. Administer SYNTHROID tablets as a single daily dose, preferably after breakfast. In hypothyroidism without myxedema, the usual initial adult dose is 0.1 mg. daily, and may be increased by 0.1 mg. every 30 days until proper metabolic balance is attained. Clinical evaluation should be made monthly and PBI measurements about every 90 days. Final maintenance dosage will usually range from 0.2-0.4 mg. daily. In adult myxedema, starting dose should be 0.025 mg. daily. The dose may be increased to 0.05 mg. after two weeks and to 0.1 mg. at the end of a second two weeks. The daily dose may be further increased at two-month intervals by 0.1 mg. until the optimum maintenance dose is reached (0.1-1.0 mg. daily).

Supplied: Tablets: 0.025 mg., 0.05 mg., 0.1 mg., 0.15 mg., 0.2 mg., 0.3 mg., 0.5 mg., scored and color-coded, in bottles of 100, 500, and 1000. Injection: 500 mcg. lyophilized active ingredient and 10 mg. of Mannitol, N.F., in 10 ml. single-dose vial, with 5 ml. vial of Sodium Chloride Injection, U.S.P., as a diluent. SYNTHROID (sodium levothyroxine) **for Injection** may be administered intravenously utilizing 200-400 mcg. of a solution containing 100 mcg. per ml. If significant improvement is not shown the following day, a repeat injection of 100-200 mcg. may be given.

TOLL AHEAD
SYNTHROID
T4
YIELD
R
R
BUMP
STOP

FLINT LABORATORIES
DIVISION OF TRAVENOL LABORATORIES, INC.
Morton Grove, Illinois 60053

THE FACTS ARE CLEAR AND HERE IS OUR OFFER.

Synthetic thyroid drugs are an improvement over animal gland products. Patients, even athyrotic ones, can be completely maintained on SYNTHROID (T_4) alone. Thyroid function tests are easy to interpret since they are *predictably* elevated when the patient adheres to SYNTHROID. Of all synthetic thyroid drugs, SYNTHROID is the most economical to the patient.

AA

OFFER:
Free TAB-MINDER medication dispensers to start or convert all your hypothyroid patients to SYNTHROID. Free information to physicians on role of thyroid function tests in a new booklet titled: "Guideposts to Thyroid Therapy." Ask us.

Name

Address

City State Zip

MSMS in action

'Dear staff, I would like to be an anaestheologish'

By Judith Marr
Managing Editor

The MSMS staff would find life a dull business without the interesting (and often amusing) requests for information regularly directed its way.

The MSMS Departments of Communications, Economics and Governmental Affairs are the recipients of many earnest, amusing, sometimes misguided, and often misspelled, queries for information. The writers range from elementary school students to doctoral candidates.

Persons often write for "everything you have" on cancer, drug abuse, heart disease, and even more impossible, the entire field of medicine.

"Dear staff," wrote a Lansing-area sixth grader. "I am thinking about my career. I would like to be an anaestheologish (forgive my spelling). It sounds like fun work and I would like to be one."

Not all the chuckles come from children.

One secretary, responding to an MSMS request for materials, replied, "We are not quite sure what you need, but we hope you can gleem the necessary info from this letter."

Amid the hundreds of requests for materials on physician assistants, the SAMA-MECO project, the numbers of physicians needed in Michigan, the MSMS doctor-of-the-week project and the status of proposed medical legislation, there come requests like the one from the new mother of a three-week-old baby who wanted to know what products contain hexachloraphene and whether she should avoid using them for her baby.

Imagine the consternation of non-medically-trained staff members when a mother-to-be asks about the technique of amniocentesis, a gentleman calls wondering why he can't use Compound W on his warts if he's a diabetic or suffers from impaired circulation; still another woman wants to know if she can get a license to pierce ears in Michigan.

And then there was the woman who had in mind the birth control pill when she asked about the AMA pamphlet "The Pill that Could Change America."

The MSMS staff does not know quite why, but another day it received a letter from a young girl student—Joyce—in Chicago, asking, "Could you please send me some information on different types of bones and their structions—like bones of animals, humans, plants."

MSMS PG series suspended this spring

Plans for the 1972 MSMS spring and fall postgraduate meeting series have been suspended until more is known from Phase II of the Alexander Grant Company study of membership attitudes toward state society PG programs.

Phase II, not yet published, contains data on Michigan physicians' attitudes toward state society PG programs. The data have been turned over tentatively to the MSMS Planning and Priorities Committee, so that a firm policy can be establishd.

In the meantime, the MSMS Budget Committee has approved the PG Committee's request for funds matching those allowed in 1971.

New Research Bulletin published by MSMS Bureau

The MSMS Bureau of Economic Information has created its own *Research Bulletin,* a two-page newsletter which is mailed periodically to MSMS delegates and Council members, to county medical society presidents and secretaries, and to members of the Council of Medical Specialties. The bulletin reports data and recent findings from various economic studies of interest to medicine, some of them conducted by the Bureau itself.

Try Eutron™ on a stubborn diastolic

pargyline hydrochloride 25 mg. and methyclothiazide 5 mg.

100 (Grooved) No. 7240
Filmtab®
EUTRON™
Pargyline
Hydrochloride
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law prohibits dispensing
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When you're not satisfied with your patient's diastolic "end point" under present treatment, consider a trial of Eutron. It will often bring further reduction of blood pressure, even in severe diastolic hypertension.

Special Characteristics of Eutron:

Course of therapy usually is smooth, with blood pressure reducing gradually over one to three weeks.

Around-the-clock effect from a single daily dose.

Provides diuresis when edema accompanies hypertension.

Free of central depressant action.

Lower doses of pargyline hydrochloride are made possible because of the methyclothiazide component.

TM—Trademark

Special Restrictions (see back of page):

Tyramine-containing foods (e.g. aged cheese) should be avoided. (For further listing of foods, see back of page.)

If alcohol is used, it should be used cautiously and in reduced amounts.

Patients should be warned against the concurrent use of non-prescription medications (particularly cold preparations and antihistamines), or prescription drugs without physician's consent.

Discontinue Eutron at least two weeks prior to elective surgery.

Before prescribing Eutron, see prescribing information in package insert. A brief summary appears on next page.

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Brief Summary
EUTRON™
pargyline hydrochloride and methyclothiazide
Filmtab®

INDICATIONS. EUTRON (pargyline hydrochloride and methyclothiazide) is indicated in the treatment of patients with moderate to severe hypertension, especially those with severe diastolic hypertension. *It is not recommended for use in patients with mild or labile hypertension amenable to therapy with sedatives and/or thiazide diuretics alone.*

Because of the potent diuretic properties of methyclothiazide, the combination is particularly suited for use when congestive heart failure or other conditions requiring diuretic therapy coexist with hypertension, or when edema attributable to antihypertensive therapy develops.

As discussed in regard to dosage and administration, it is desirable to establish the dosage requirements for EUTRON by the administration of Eutonyl and Enduron separately.

CONTRAINDICATIONS. 1. Pargyline therapy is contraindicated in patients with pheochromocytoma, paranoid schizophrenia, hyperthyroidism and advanced renal failure.

2. Pargyline should not be administered to those with malignant hypertension, or to children under twelve years of age because significant clinical information concerning the use of the drug in these conditions is not available.

3. In general, the following drugs or agents are contraindicated in patients receiving pargyline hydrochloride:

a. Centrally acting sympathomimetic amines such as amphetamine and its derivatives (also found in anorectic preparations).
   Peripherally acting sympathomimetic drugs such as ephedrine and its derivatives (also found in nasal decongestants, hay fever preparations and cold remedies).

b. Aged and natural cheese (e.g., Cheddar, Camembert, and Stilton), and other foods (e.g., pickled herring, Chianti wine, pods of broad beans, chicken livers, chocolate and yeast products), which require the action of bacteria or molds for their preparation or preservation, because of the presence of pressor substances such as tyramine. Banana peels are also contraindicated. Cream cheese, processed cheese, and cottage cheese can be allowed in the diet during EUTRON therapy, since their tyramine content is inconsequential.
   In some patients receiving EUTRON, tyramine may precipitate an abrupt rise in blood pressure accompanied by some or all of the following: severe headache, chest pain, profuse sweating, palpitation, tachycardia or bradycardia, visual disturbances, stertorous breathing, coma, and intracranial bleeding (which could be fatal). A phenothiazine derivative or phentolamine may be administered parenterally for treatment of such an acute hypertensive reaction.

c. Parenteral administration of reserpine or guanethidine may cause hypertensive reactions from sudden release of catecholamines. Parenteral use of these drugs is contraindicated during, and for at least one week following, treatment with EUTRON.

d. Imipramine, amitriptyline, desipramine, nortriptyline, or their analogues should not be used with pargyline. The use of these drugs with monoamine oxidase inhibitors has been reported to cause vascular collapse and hyperthermia which may be fatal. A drug-free interval (about two weeks) should separate therapy with EUTRON and use of these agents.

e. Methyldopa or dopamine, which may cause hyperexcitability in patients receiving pargyline, should not be given.

f. Other monoamine oxidase inhibitors should not be added to a EUTRON regimen since they may augment the effects of pargyline.

4. Methyclothiazide is contraindicated in patients with a known sensitivity to methyclothiazide and/or other thiazide diuretics. It should not be used in patients with severe renal disease (except nephrosis) or complete renal shutdown. Thiazide diuretics should not be used in the presence of severe liver disease and/or impending hepatic coma. Hepatic coma has been reported as a consequence of hypokalemia in patients receiving thiazide diuretics.

WARNINGS

A. PATIENTS

1. PATIENTS SHOULD BE WARNED AGAINST THE USE OF ANY OVER-THE-COUNTER PREPARATIONS, PARTICULARLY "COLD PREPARATIONS" AND ANTIHISTAMINES OR PRESCRIPTION DRUGS WITHOUT THE KNOWLEDGE AND CONSENT OF THE PHYSICIAN.
2. PATIENTS SHOULD BE CAUTIONED ON THE USE OF CHEESE (SEE CONTRAINDICATIONS) AND ALCOHOLIC BEVERAGES IN ANY FORM.
3. PATIENTS SHOULD BE WARNED ABOUT THE LIKELIHOOD OF THE OCCURRENCE OF ORTHOSTATIC HYPOTENSION.
4. PATIENTS SHOULD BE INSTRUCTED TO REPORT PROMPTLY THE OCCURRENCE OF SEVERE HEADACHE OR OTHER UNUSUAL SYMPTOMS.
5. PATIENTS WITH ANGINA PECTORIS OR CORONARY ARTERY DISEASE SHOULD BE ESPECIALLY WARNED NOT TO INCREASE THEIR PHYSICAL ACTIVITIES IN RESPONSE TO A DIMINUTION IN ANGINAL SYMPTOMS OR AN INCREASE IN WELL-BEING OCCURRING DURING TREATMENT WITH EUTRON.

B. PHYSICIANS

1. WHEN INDICATED THE FOLLOWING SHOULD BE CAUTIOUSLY PRESCRIBED IN REDUCED DOSAGES:
   a. ANTIHISTAMINES
   b. HYPNOTICS, SEDATIVES OR TRANQUILIZERS
   c. NARCOTICS (MEPERIDINE SHOULD NOT BE USED)
2. DISCONTINUE EUTRON AT LEAST TWO WEEKS PRIOR TO ELECTIVE SURGERY.
3. IN EMERGENCY SURGERY THE DOSE OF NARCOTICS OR OTHER PREMEDICATIONS SHOULD BE REDUCED TO 1/4 TO 1/5 THE USUAL AMOUNT. CLINICAL EXPERIENCE HAS SHOWN THAT RESPONSE TO ALL ANESTHETIC AGENTS CAN BE EXAGGERATED IN PATIENTS RECEIVING EUTRON. THEREFORE THE DOSE OF THE ANESTHETIC SHOULD BE CAREFULLY ADJUSTED.
4. PARGYLINE HYDROCHLORIDE MAY INDUCE HYPOGLYCEMIA.
5. CARE SHOULD BE EXERCISED IN USING EUTRON IN PATIENTS WITH ADVANCED RENAL FAILURE.

The possibility of sensitivity reactions to methyclothiazide or pargyline should be considered in patients with a history of allergy or bronchial asthma.

There have been several reports published and unpublished, concerning nonspecific small bowel lesions consisting of stenosis with or without ulceration, associated with the administration of enteric-coated thiazides with potassium salts. These lesions may occur with enteric-coated potassium tablets alone or when they are used with nonenteric-coated thiazides, or certain other oral diuretics.

These small bowel lesions have caused obstruction, hemorrhage and perforation. Surgery was frequently required and deaths have occurred.

Available information tends to implicate enteric-coated potassium salts although lesions of this type also occur spontaneously. Therefore, coated potassium-containing formulations should be administered only when adequate dietary supplementation is not practical, and should be discontinued immediately if abdominal pain, distention, nausea, vomiting or gastrointestinal bleeding occurs.

The possibility of exacerbation or activation of systemic lupus erythematosus has been reported for sulfonamide derivatives, including thiazides.

EUTRON does not contain added potassium.

USE IN PREGNANCY

Pargyline Hydrochloride. Safe use of pargyline during pregnancy or lactation has not yet been established. Before prescribing pargyline in pregnancy, in lactation, or in women of childbearing age, the potential benefits of the drug should be weighed against its possible hazard to mother and child.

Methyclothiazide. Thiazides should be used with caution in pregnant women and nursing mothers since they cross the placental barrier and appear in cord blood and in breast milk. The use of thiazides may result in fetal or neonatal jaundice, bone marrow depression and thrombocytopenia, altered carbohydrate metabolism in newborn infants of mothers showing decreased glucose tolerance, and possible other adverse reactions which have occurred in the adult. When the drug is used in women of childbearing age, the potential benefits of the drug should be weighed against the possible hazards to the fetus.

PRECAUTIONS

Pargyline Hydrochloride. The therapeutic response to a variety of drugs may be changed, or exaggerated, in patients receiving a monoamine oxidase inhibitor such as pargyline hydrochloride. Caffeine, alcohol, antihistamines, barbiturates, chloral hydrate, and other hypnotics, sedatives, tranquilizers and narcotics (meperidine should not be used), should be used cautiously and at reduced dosage in patients who are taking pargyline.

Pargyline has not been shown to damage the kidney or liver. However, laboratory studies including complete blood counts, urinalyses, and liver function tests should be performed periodically. The drug should be used with caution in the presence of liver disease. All patients with impaired circulation to vital organs from any cause including those with angina pectoris, coronary artery disease, and cerebral arteriosclerosis should be closely observed for symptoms of orthostatic hypotension. If hypotension develops in these patients, EUTRON dosage should be reduced or therapy discontinued since severe and/or prolonged hypotension may precipitate cerebral or coronary vessel thromboses.

The hypotensive effect of pargyline may be augmented by febrile illnesses. It may be advisable to withdraw the drug during such diseases.

Since pargyline is excreted primarily in the urine, patients with impaired renal function may experience cumulative drug effects. Such patients should also be watched for elevations of blood urea nitrogen and other evidence of progressive renal failure. If such alterations should persist and progress, the drug should be discontinued.

An increased response to central depressants may be manifested by acute hypotension and increased sedative effect. Pargyline also may augment the hypotensive effects of anesthetic agents and surgery. For this reason, the drug should be discontinued from at least two weeks prior to surgery.

In the event of emergency surgery smaller than usual doses (1/4 to 1/5) of narcotics, analgesics, sedatives, and other premedications should be used. If severe hypotension should occur, this can be controlled by small doses of a vasopressor agent such as levarterenol.

Pargyline therapy should not be used in individuals with hyperactive or hyperexcitable personalities, as some of these patients show an undesirable increase in motor activity with restlessness, confusion, agitation and disorientation. Clinical studies have shown that pargyline may unmask severe psychotic symptoms such as hallucinations or paranoid delusions in some patients with pre-existing serious emotional problems. This can usually be controlled by judicious administration of chlorpromazine intramuscularly, or other phenothiazines, the patient remaining supine for one hour after administration.

Pargyline should be used with caution in patients with Parkinsonism, as it may increase symptoms. In addition, great care is required if pargyline is administered in conjunction with anti-parkinsonian agents.

In experience to date, pargyline has not been associated with eye changes or optic atrophy as reported with the use of some hydrazine monoamine oxidase inhibitors. However, patients receiving this drug for prolonged periods should be examined for any changes in color perception, visual fields, fundi, and visual acuity.

Clinical reports state that certain individuals receiving pargyline for a prolonged period of time are refractory to the nerve-blocking effects of local anesthetics, e.g., lidocaine.

Methyclothiazide. Thiazide therapy should be used with caution in patients with severely impaired renal function because of the possibility of cumulative effects. Caution is also necessary in patients with severely impaired hepatic function or progressive liver disease.

Thiazide drugs may reduce response to levarterenol. Accordingly, the dosage of vasopressor agents may need to be modified in surgical patients who have been receiving thiazide therapy.

Thiazide drugs may increase the responsiveness to tubocurarine.

The antihypertensive effect of the drug may be enhanced in the sympathectomized patient.

All patients should be observed for clinical signs of fluid or electrolyte imbalance, including hyponatremia ("low-salt" syndrome). These include thirst, dryness of the mouth, lethargy and drowsiness.

Hypokalemia may occur during therapy with methyclothiazide. In such cases supplemental potassium may be indicated. Potassium depletion can be hazardous in patients taking digitalis. Myocardial sensitivity to digitalis is increased in the presence of reduced serum potassium and signs of digitalis intoxication may be produced by formerly tolerated doses of digitalis. Hypochloremic alkalosis may occur following intensive or prolonged thiazide therapy. Replacement of chloride may be indicated in such cases.

Thiazides may decrease serum P.B.I. levels without signs of thyroid disturbance.

ADVERSE REACTIONS. Generally side effects should not be severe or serious when the recommended dosages are used, and necessary precautions are observed. If side effects are severe or persist in spite of symptomatic treatment, the dosage should be reduced or the drug withdrawn. See also Warnings and Precautions.

Pargyline Hydrochloride. The most frequently occurring side effects are those associated with orthostatic hypotension (dizziness, weakness, palpitation, or fainting). These usually respond to a reduction of dosage. Patients should be warned against rising to a standing position too quickly, especially when getting out of bed. Severe and persistent orthostatic hypotension should be avoided by reduction in dosage and/or discontinuation of therapy.

Mild constipation, fluid retention with or without edema, dry mouth, sweating, increased appetite, arthralgia, nausea and vomiting, headache, insomnia, difficulty in micturition nightmares, impotence and delayed ejaculation, rash and purpura, have also been encountered. Hyperexcitability, increased neuromuscular activity (muscle twitching) and other extra-pyramidal symptoms have been reported. Gain in weight may be due either to edema or increased appetite. Drug fever is extremely rare. In some patients reduction of blood sugar has been noted. Although the significance of this has not been elucidated, the possibility of hypoglycemic effects should be borne in mind. Congestive heart failure has been reported in patients with reduced cardiac reserve.

Methyclothiazide. Side effects that may accompany thiazide therapy include anorexia, nausea, vomiting, diarrhea, headache, dizziness, paresthesias, weakness, skin rash, photosensitivity. Jaundice and pancreatitis also have been reported.

Blood dyscrasias, including thrombocytopenia with purpura, agranulocytosis and aplastic anemia, have been reported with thiazide drugs.

Thiazides have been reported, on rare occasions, to have elevated serum calcium to hypercalcemic levels. The serum calcium levels have returned to normal when the medication has been stopped. This phenomenon may be related to the ability of the thiazide diuretics to lower the amount of calcium excreted in the urine.

Elevations of blood urea nitrogen, serum uric acid, and blood sugar have occurred with the use of thiazide drugs. Symptomatic gout may be induced.

Although not established as an adverse effect of methyclothiazide, it has been reported that thiazide diuretics may produce a cutaneous vasculitis in elderly patients.

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Here are the answers to your questions about MSMS foundations

By Robert C. Prophater, MD
Chairman, MSMS Committee
on Utilization Review
and Health Insurance Problems

As recommended by the House of Delegates The Council through its Committee on Utilization Review and Health Insurance Problems has revised the Articles of Incorporation and Bylaws for the proposed MSMS Foundation.

The Council will present draft number 7 of these documents to the House of Delegates for approval at the Spring Meeting (March 20-21, 1972) at the Detroit Hilton Hotel.

Presented below are answers to the most frequent questions raised by delegates concerning the need for a foundation.

1. *What is a Foundation?*

The word "Foundation" has no universally accepted definition and their purposes, structures, etc. vary. Generally a "Foundation for Medical Care" is a separate corporation sponsored by a state or county medical society. Some foundations offer peer review services to insurance carriers and governmental agencies and are usually referred to as the "Hennepin" or "Missouri" type. Others also perform claims processing and pay claims, and are referred to as the "San Joaquin" or "California" type.

2. *What type of "Foundation" is being proposed for MSMS?*

The primary function of the proposed MSMS Foundation will be peer review and it will not operate as an insurance carrier nor will it proccess claims. It is closely modeled after the Health Care Foundation of Missouri, which is controlled jointly by the governing boards of both the Missouri State Medical Association and the Missouri Association of Osteopathic Physicians and Surgeons. The Michigan Foundation's corporate body and board of Trustees will be composed of both MDs and DOs on a basis proportionate to each group's percentage of total physicians in the state.

3. *Why should the Michigan State Medical Society join with the Michigan Association of Osteopathic Physicians and Surgeons, Inc. in forming a Foundation?*

All of the proposals before Congress which deal with the provision and financing of health care contain provisions for cost and quality control of health care services through peer review. Senator Bennett has offered an amendment to H.R. 1, the Social Security Amendments of 1971, requiring the establishment of professional standards review organizations throughout the United States. Under the amendment, membership of the qualifying organization must be voluntary and open to all doctors of medicine or osteopathy licensed to engage in the practice of medicine or surgery in the area without requirement of membership in or payment of dues to any organized medical society or association. As a further condition, the qualifying organization may not restrict the eligibility of any member for services as an officer of the PSRO or eligibility for an assignment to duties of such PSRO.

Review activity of the organization would encompass the use of provider, patient and practitioner profiles and regional norms as review checkpoints. The PSRO would be responsible for determining whether: (1) health care services were medically necessary; (2) whether the quality of services meets professionally recognized standards; and (3) whether the proposed hospital or other health care facility services could, consistent with the provision of appropriate medical care, be provided more economically on an outpatient basis or in a different type of inpatient facility.

4. *Why is it necessary for MSMS to form a Foundation to do peer review when MSMS already has a peer review program in existence?*

The proposed MSMS Foundation will have the added capacity to contract with insurance carriers and governmental agencies. Moneys received can be used to compensate physicians and to hire necessary staff without jeopardizing the Michigan State Medical Society's tax-exempt status. The New Mexico Foundation is now doing peer review for the State of New Mexico's Medicaid program, and the Florida Foundation has signed an agreement to provide peer review services for Blue Shield of Florida, Inc. Both Michigan Blue Shield and the Michigan Department of Social Services have indicated verbally a willingness to discuss the possibilities

(Continued on page 240)

Harry Schwartz tells of foundations

"The fastest growing innovation in American medicine today is the medical foundation," Harry Schwartz writes in the New York *Times*. According to Schwartz, before the 1970's are ended millions of Americans will look to such organizations—"essentially a loose form of group practice"—for their medical care. About 50 foundations are now functioning or being formed, a number that is expected to rise to 200 a year from now.

In acute gonorrhea

(urethritis, cervicitis, proctitis when due to susceptible strains of N. gonorrhoeae)

Sterile Trobicin®
(spectinomycin dihydrochloride pentahydrate)—For Intramuscular injections, 2 gm vials containing 5 ml when reconstituted with diluent. 4 gm vials containing 10 ml when reconstituted with diluent.

An aminocyclitol antibiotic active *in vitro* against most strains of *Neisseria gonorrhoeae* (MIC 7.5 to 20 mcg/ml). Definitive *in vitro* studies have shown no cross resistance of *N. gonorrhoeae* between Trobicin and penicillin.

Indications: Acute gonorrheal urethritis and proctitis in the male and acute gonorrheal cervicitis and proctitis in the female when due to susceptible strains of *N. gonorrhoeae*.

Contraindications: Contraindicated in patients previously found hypersensitive to Trobicin. Not indicated for the treatment of syphilis.

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Warnings: Antibiotics used to treat gonorrhea may mask or delay the symptoms of incubating syphilis. Patients should be carefully examined and monthly serological follow-up for at least 3 months should be instituted if the diagnosis of syphilis is suspected.

Safety for use in infants, children and pregnant women has not been established.

Precautions: The usual precautions should be observed with atopic individuals. Clinical effectiveness should be monitored to detect evidence of development of resistance of *N. gonorrhoeae*.

Adverse reactions: The following reactions were observed during the single-dose clinical trials: soreness at the injection site, urticaria, dizziness, nausea, chills, fever and insomnia.

During multiple-dose subchronic tolerance studies in normal human volunteers, the following were noted: a decrease in hema-

Trobicin®

sterile spectinomycin dihydrochloride pentahydrate, Upjohn

single-dose intramuscular treatment

High cure rate:* 96% of 571 males, 95% of 294 females
Dosages, sites of infection, and criteria for diagnosis and cure are defined below.)**

Assurance of a single-dose, physician-controlled treatment schedule

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No allergic reactions occurred in patients with an alleged history of penicillin sensitivity when treated with Trobicin, although penicillin antibody studies were not performed

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Active against most strains of Neisseria gonorrhoeae in vitro (M.I.C. 7.5-20 mcg/ml)

A single two-gram injection produces peak serum concentrations averaging about 100 mcg/ml in one hour (average serum concentrations of 15 mcg/ml present 8 hours after dosing)

Note: Antibiotics used in high doses for short periods of time to treat gonorrhea may mask or delay the symptoms of incubating syphilis. Since the treatment of syphilis demands prolonged therapy with any effective antibiotic, and since Trobicin is not indicated in the treatment of syphilis, patients being treated for gonorrhea should be closely observed clinically. Monthly serological follow-up for at least 3 months should be instituted if the diagnosis of syphilis is suspected. Trobicin is contraindicated in patients previously found hypersensitive to it.

Data compiled from reports of 14 investigators. **Diagnosis was confirmed by cultural identification of *N. gonorrhoeae* on Thayer-Martin media in all patients. Criteria for cure: negative culture after at least 2 days post-treatment in males and at least 7 days post-treatment in females. Any positive culture obtained post-treatment was considered evidence of treatment failure even though the follow-up period might have been less than the periods cited above under "criteria for cure" except when the investigator determined that reinfection through additional sexual contacts was likely. Such cases were judged to be reinfections rather than relapses or failures. These cases were regarded as non-evaluatable and were not included. JA72 1848-6

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globin, hematocrit and creatinine clearance; elevation of alkaline phosphatase, BUN and SGPT. In single and multiple-dose studies in normal volunteers, a reduction in urine output was noted. Extensive renal function studies demonstrated no consistent changes indicative of renal toxicity.

Dosage and administration: Keep at 25°C and use within 24 hours after reconstitution with diluent.
Male—single 2 gram dose (5 ml) intramuscularly. Patients with gonorrheal proctitis and patients being re-treated after failure of previous antibiotic therapy should receive 4 grams (10 ml). In geographic areas where antibiotic resistance is known to be prevalent, initial treatment with 4 grams (10 ml) intramuscularly is preferred.
Female—single 4 gram dose (10 ml) intramuscularly.

How supplied: *Vials, 2 and 4 grams—with ampoule of Bacteriostatic Water for Injection with Benzyl Alcohol 0.9% w/v.* Reconstitution yields 5 and 10 ml respectively with a concentration of spectinomycin dihydrochloride pentahydrate equivalent to 400 mg spectinomycin per ml. For intramuscular use only.
Susceptibility Powder—for testing *in vitro* susceptibility of *N. gonorrhoeae.*

Human pharmacology: Rapidly absorbed after intramuscular injection. A two-gram injection produces peak serum concentrations averaging about 100 mcg/ml at one hour with 15 mcg/ml at 8 hours. A four-gram injection produces peak serum concentrations averaging 160 mcg/ml at two hours with 31 mcg/ml at 8 hours.
For additional product information, see your Upjohn representative or consult the package insert. MED-B-1-S (LWB)

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Michigan mediscene

March 12—Michigan Academy of Family Physicians, board meeting, MSMS Headquarters, contact: Louis R. Zako, MD, MAFP president, 7720 Allen Road, Allen Park, 48101

March 15-17—"Three days of electrocardiography for physicians," Towsley Center, U-M, sponsored by U-M Department of Postgraduate Medicine, contact: Chairman, Department of Postgraduate Medicine, Towsley Center, Ann Arbor, 48104

March 19—The Council, Sheraton Cadillac Hotel, Detroit, contact: Warren F. Tryloff, MSMS Headquarters

March 20-21—Spring Session, MSMS House of Delegates, Detroit Hilton Hotel, contact: Richard Campau, MSMS Headquarters

March 22—Symposium on Approaching Death, Michigan Cancer Foundation, 7 p.m., Regina High School Auditorium, 20200 Kelly Road, Harper Woods, contact: Miss Joan H. Kolodziej, Public Information Director, MCF, 4811 John R Street, Detroit, 48201

March 26—Michigan State Medical Assistants Society, board meeting, 11 a.m., MSMS Headquarters, contact: Mrs. Betty L. Boers, president, MSMAS, 1116 Sheridan, Kalamazoo, 49001

March 29—Muskegon Trauma Day, Holiday Inn, Muskegon, contact: Guida Anessa, MD, 205 Medical Center, Muskegon

March 29-30—Annual Michigan Conference on Maternal and Perinatal Health, Olds Plaza Hotel, Lansing, contact: Joseph L. Sheets, MD, 2909 E. Grand River, Lansing, or Helen Schulte, MSMS Headquarters

March 31-April 2—American Association of Suicidology, Detroit Hilton, contact: Bruce L. Danto, MD, 466 Fisher Bldg., Detroit, 48202

April 3—Annual Beaumont Lecture—Wayne County Medical Society, Detroit, contact: William Blodgett, MD, Wayne County Medical Society, 1010 Antietam, Detroit, 48207

April 5-8—49th Annual Meeting, American Orthopsychiatric Association, Cobo Hall, Detroit, contact: Sylvia F. Gruggett, AOA, 1790 Broadway, New York, N.Y., 10019

April 8—Health Careers Day, Michigan State University, sponsored by MSU and Michigan Health Council, contact: John A. Doherty, MHC, 712 Abbott, East Lansing, 48823

April 12—Great Lakes Health Manpower Conference, Kellogg Center, East Lansing, contact: John A. Doherty, executive vice president, Michigan Health Council, 712 Abbott, East Lansing, 48823

April 13-15—Michigan Heart Association Heart Days, Cobo Hall, Detroit, contact: Harold Arnow, publicity director, MHA, 13100 Puritan, Detroit, 48227

April 19—Woman's Auxiliary to MSMS, Legislative Day, Olds Plaza, Lansing, contact: Mrs. R. J. Westerhoff, 2458 Maplewood, SE, Grand Rapids, 49506

April 19-20—Woman's Auxiliary to MSMS, spring conference, Hospitality Inn, Lansing, contact: Mrs. Charles Schoff, 5209 Sunset Drive, Midland, 48640

April 21—Annual Conference on Medical Aspects of Michigan High School Sports, University of Michigan, contact: Herbert A. Auer, MSMS Headquarters

April 23-26—MSU College of Human Medicine Workshop, "The Community: A Base for Undergraduate Medical Education," Park Place Motor Inn, Traverse City, contact: Andrew D. Hunt, Jr., MD, Dean, College of Human Medicine, MSU, East Lansing, 48823

April 26—The Council, MSMS Headquarters, contact: Warren F. Tryloff, Director, MSMS Headquarters, Box 950, East Lansing, 48823

April 27-30—Annual Convention, American Association of Medical Assistants, State of Michigan, Holiday Inn, Crosstown Parkway, Kalamazoo, contact: Mrs. Betty Boers, president, 1116 Sheridan, Kalamazoo, 49001

April 30-May 5—American Nurses Association Biennial Convention, Cobo Hall, Detroit, contact: Miss Virginia Stone, executive director, Detroit district, Michigan Nurses Association, 396 Fisher Building, Detroit, 48202

April 28-29—Cancer symposium, Michigan Division, American Cancer Society, and Wayne State University, "Early Carcinoma of the Breast," at the university, contact: Bob Hillcoat, University Relations, WSU, Detroit, 48202

May 10-12—Annual meeting, Michigan Public Health Association, Park Place Motor Inn, Traverse City, contact: Ralph Lewis, Department of Postgraduate Medicine, Towsley Center, The University of Michigan, Ann Arbor, 48104

May 13—17th Annual all-day scientific meeting, Michigan Society of Anesthesiologists, Sheraton-Cadillac Hotel, Detroit, contact: Ralph E. Bauer, MD, MSA secretary-treasurer, Henry Ford Hospital, Detroit, 48202

May 18-19—Annual Gull Lake meeting, MSMS Committee on Maternal and Perinatal Health, Kellogg Biological Station, Gull Lake, contact: Helen Schulte, MSMS Headquarters, Box 950, East Lansing, 48823

May 18-19—Fifteenth Annual Clinic Days, emphasis "Team Medicine," Children's Hospital of Michigan and Wayne State University School of Medicine, at the hospital, contact: Larry E. Fleischmann, MD, chairman, 3901 Beaubien, Detroit, 48201

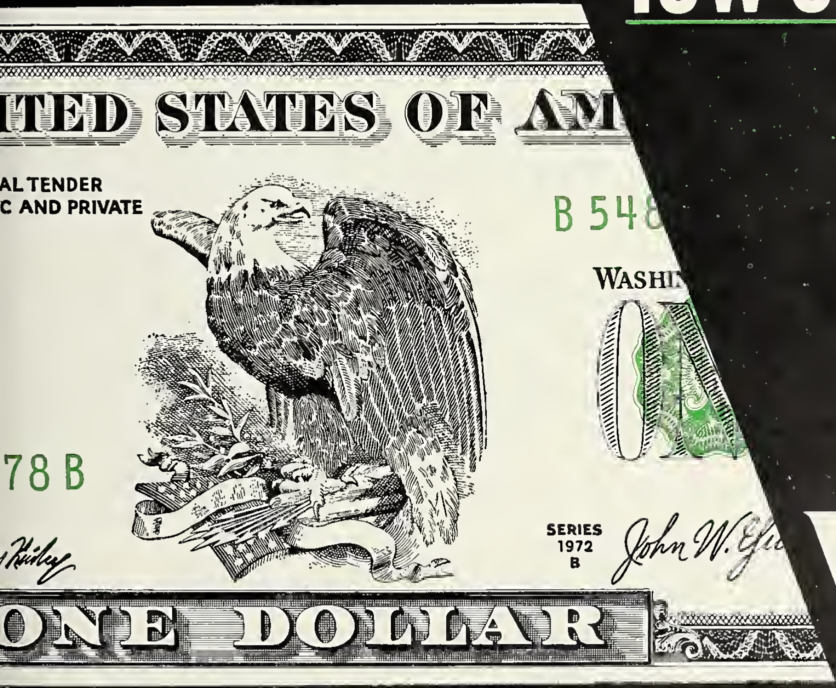
May 19-20—11th annual Kidney Disease Symposium, sponsored by Kidney Foundation of Michigan, at Mercy College Conference Center, Detroit, contact: Sidney Baskin, MD, chairman, 3378 Washtenaw Ave., Ann Arbor, 48104.

May 20-27—Michigan Week

May 22-23—Michigan chapter meeting and scientific session, American College of Emergency Physicians, Shanty Creek, Bellaire, contact: Gaius Clark, MD, 865 Pebblebrook Lane, East Lansing, 48823

May 24-26—Annual Medical Staff-Trustee-Administrator Forum, sponsored by Michigan Hospital

Something new in ampicillin therapy: low cost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FOUNDATIONS/Continued

of contracting for peer review services with a MSMS sponsored Foundation.

5. *How will the Michigan Foundation operate?*

Article II, Sec. 4 b of the proposed Bylaws describe the operation of the Foundation as follows:

> Peer Review assignments and contracts obtained by the corporation will be whenever possible, delegated to and carried out at the appropriate county or regional or local levels by review panels of doctors locally so designated with such concerned specialist support as the review may require. An appeal procedure will be established for the appeal throughout all levels of the decisions, determinations or rulings to the Peer Review Committee of the Board of Trustees. The corporation will retain administrative and fiscal responsibility therefore and it will foster all peer review work within the ethical concepts of the American Medical Association and of the American Osteopathic Association, and within the Guidelines of the Michigan State Medical Society and the Michigan Association of Osteopathic Physicians and Surgeons. Consistent with that latter purpose, the corporation will endeavor to promote uniformity of procedures and guidelines for peer review procedures within the State.

10 MSMS members now on RAG of MARMP

Ten MSMS members are newly-elected to the Regional Advisory Group, the 34-member policy-making agency of the Michigan Association for Regional Medical Programs (MARMP).

They include William G. Birch, MD, Kalamazoo; John B. Bryan, MD, Royal Oak; William Chavis, MD, Detroit; John Gronvall, MD, Ann Arbor; D. Bonta Hiscoe, MD, Lansing; Andrew D. Hunt, Jr., MD, East Lansing; John C. Peirce, MD, Grand Rapids; R. Gerald Rice, MD, Lansing, and Lewis Simoni, MD, Flint.

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Welcome

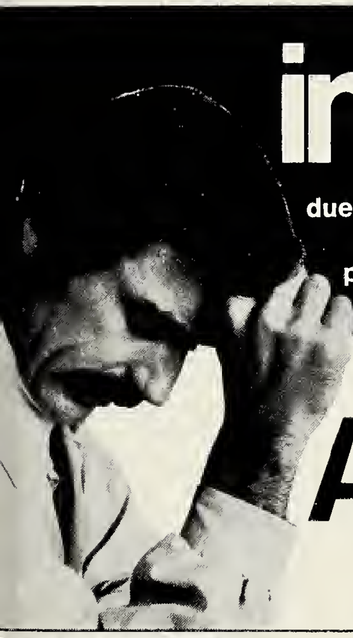
Members of the Michigan State Medical Society join in welcoming the following new members into a progressive state medical organization. MSMS is dedicated to promoting the science and art of medicine, the protection of the public health, and the betterment of the medical profession. Each new member is encouraged to join with other MSMS members at both the local and the state levels in achieving these goals.

Edward Alpert, MD, 2301 Huron Parkway, Ann Arbor 48104
Jagdish B. Bhagat, MD, 6071 W. Knoll Drive, Flint 48705
E. R. Cleveland, MD, 1500 Weiss St., Saginaw 48602
Edward D. Coppola, MD, Dept. of Surgery—Mich. State Univ., East Lansing 48823
Jack W. DeLong, MD, 144 W. 26th St., Holland 49423
K. C. Demetropoulos, MD, VA Hospital, Ann Arbor 48105
James A. Greene, MD, 1521 Gull Rd., Kalamazoo 49001
John R. Gruca, MD, 108 S. Christine Circle, Mt. Clemens 48043
Owen G. Haig, MD, 1521 Gull Rd., Kalamazoo 49001
Fikria E. Hassan, MD, Mott Children's Hlth. Center, Flint 48503
Thelma M. Hernandez, MD, 18044 Edgefield Dr., Fraser 48026
Paul J. Hettle, MD, 2301 Center, Bay City 48706
David Katz, MD, 3001 Plymouth Rd., Ann Arbor 48105
Jerald B. Maltzman, MD, Sinai Hospital, Detroit 48235
Douglas McLearon, MD, 2149 W. Grand River, Howell 48843
Lance E. Nelson, MD, 575 Robbins Rd., Grand Haven 49417
Elizabeth L. Schmitt, MD, Mercy Hospital, Monroe 48161
Albert J. Silverman, MD, Univ. Medical Center, Ann Arbor 48104
Martin I. Schock, MD, 26657 Woodward Ave., Huntington Woods 48070
Gloria M. Strutz, MD, 27827 Thirty Mile Rd., Richmond 48062
Ralph Ten Have, Jr., MD, 425 Cherry St., S.E., Grand Rapids 49502
Richard S. Traul, MD, 216 Bronson Medical Ctr., Kalamazoo 49001
Carl Van Appledorn, MD, Dept. of Urology—Univ. Medical Center, Ann Arbor 48104

The treatment of

impotence

NEW CLINICAL STUDY



due to androgenic deficiency in the American male.
The concept of chemotherapy plus the physician's psychological support is confirmed as effective therapy.

The Treatment of Impotence with Methyltestosterone Thyroid (100 patients—Double Blind Study)
T. Jakobovits
Fertility and Sterility, January 1970
Official Journal of the American Fertility Society

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Each white tablet contains:
Methyl Testosterone ..2.5 mg.
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Pyridoxine HCL ....5 mg.
Niacinamide ....75 mg.
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Contraindications: Android is contraindicated in patients with prostatic carcinoma, severe cardiorenal disease and severe persistent hypercalcemia, coronary heart disease and hyperthyroidism. Occasional cases of jaundice with plugging biliary canaliculi have occurred with average doses of Methyl Testosterone. Thyroid is not to be used in heart disease and hypertension.

Warnings: Large dosages may cause anorexia, nausea, vomiting abdominal pain, diarrhea, headache, dizziness, lethargy, paresthesia, skin eruptions, loss of libido in males, dysuria, edema, congestive heart failure and mammary carcinoma in males.

Precautions: If hypothyroidism is accompanied by adrenal insufficiency the latter must be corrected prior to and during thyroid administration.

Adverse Reactions: Since Androgens, in general, tend to promote retention of sodium and water, patients receiving Methyl Testosterone, in particular elderly patients, should be observed for edema.

Hypercalcemia may occur, particularly in immobilized patients: use of Testosterone should be discontinued as soon as hypercalcemia is detected.

References: 1. **Montesano, P., and Evangelista, I.** Methyltestosterone-thyroid treatment of sexual impotence. Clin Med 12:69, 1966. 2. **Dublin, M. F.** Treatment of impotence with methyltestosterone-thyroid compound. West Med 5:67, 1964. 3. **Titeff, A. S.** Methyltestosterone-thyroid in treating impotence. Gen Prac 25:6, 1962. 4. **Hellman, L., Bradlow, H. L., Zumoff, B., Fukushima, D. K., and Gallagher, T. F.** Thyroid-androgen interrelations and the hypocholesteremic effect of androsterone. J Clin Endocr 19:936, 1959. 5. **Farris, E. J., and Colton, S. W.** Effects of L-thyroxine and liothyronine on spermatogenesis. J Urol 79:863, 1958. 6. **Osol, A., and Farrar, G. E.** United States Dispensatory (ed. 25). Lippincott, Philadelphia, 1955, p. 1432. 7. **Wershub, L. P.** Sexual Impotence in the Male. Thomas, Springfield, Ill., 1959, pp. 79-99.

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General Theme:

CONTRACEPTION

featuring

- leading researchers and experts in many aspects of contraception
- presentation of distinguished alumni awards

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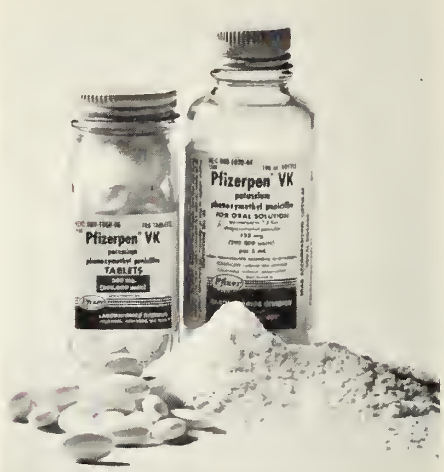

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125 mg. (200,000 units)/5 cc.:
bottles of 100 cc. and 150 cc.
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**Pfizerpen VK Tablets
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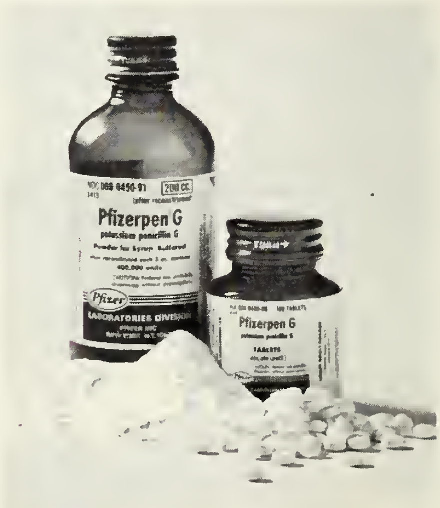

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Physician assistants were the major topics at the annual Mid-Winter Educational Seminar Jan. 29-30 of the American Association of Medical Assistants, the State of Michigan. On the panel was Robert E. Rice, MD, Greenville, center, who appreciated the seminar program shaped like a doctor's bag. Chairmen of the seminar were Mrs. Jean McCray, left, and Mrs. Patricia Voke, both of Battle Creek, where the seminar took place.

Michigan's medical assistants hold educational meet

Five members of the Michigan medical assistants' association are members of national committees. They are, from left, Miss Margaret Broadwell, Detroit, Legislative Committee; Mrs. Patricia Austin, Ann Arbor, Nominating Committee; Mrs. Claire E. Van Dam, Stevensville, Education Committee; Mrs. Betty Lou Willey, Port Huron, Committee on Professional Advancement, and Mrs. Betty Boers, Kalamazoo, Constitution and Bylaws Committee.

A special guest at the medical assistants' seminar was Miss Laura L. Lockhart, Akron, Ohio, vice speaker of the AAMA House of Delegates. She was met by Mrs. Betty Boers, Kalamazoo, state president.

Also on the seminar program that day in Battle Creek were, from left, Donald Foy, Chicago, executive with the AMA Health Manpower Committee; George Mallinson, PhD, Dean, College of Graduate Studies, Western Michigan University, and George W. Slagle, MD, Battle Creek, member of the AMA Council of Medical Services.

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Painful night leg cramps...

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for any patient–
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- ☐ Prevents painful night leg cramps
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Prescribing Information — Composition: Each white, beveled, compressed tablet contains: Quinine sulfate, 260 mg., Aminophylline, 195 mg. **Indications:** For the prevention and treatment of nocturnal and recumbency leg muscle cramps, including those associated with arthritis, diabetes, varicose veins, thrombophlebitis, arteriosclerosis and static foot deformities. **Contraindications:** Quinamm is contraindicated in pregnancy because of its quinine content. **Precautions/Adverse Reactions:** Aminophylline may produce intestinal cramps in some instances, and quinine may produce symptoms of cinchonism, such as tinnitus, dizziness, and gastrointestinal disturbance. Discontinue use if ringing in the ears, deafness, skin rash, or visual disturbances occur. **Dosage:** One tablet upon retiring. Where necessary, dosage may be increased to one tablet following the evening meal and one tablet upon retiring. **Supplied:** Bottles of 100 and 500 tablets.

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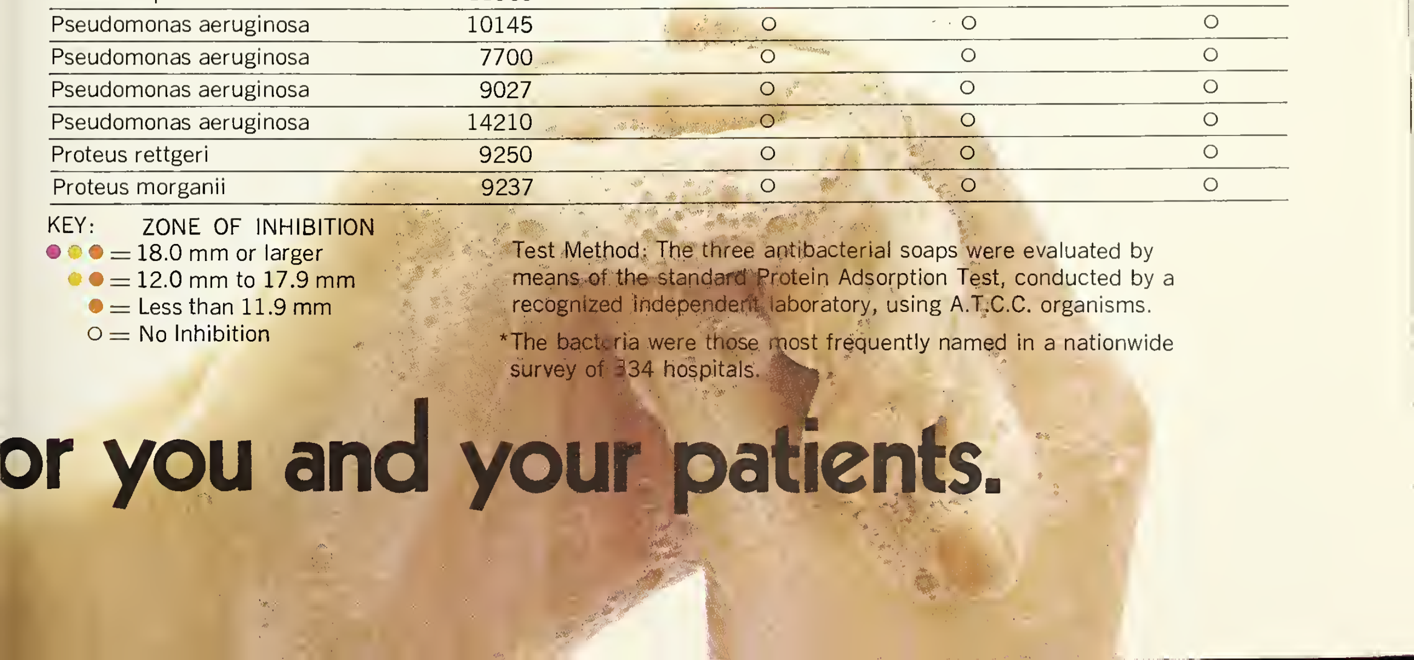
BACTERIA	A.T.C.C. No.	P-300	Soap "D"	Soap "S"
Gram Positive				
Staphylococcus aureus	8094	🟣🟡🟠	🟠	🟠
Staphylococcus aureus	11371	🟣🟡🟠	🟠	🟠
Staphylococcus aureus	8096	🟣🟡🟠	🟠	🟠
Staphylococcus aureus	10390	🟣🟡🟠	🟠	🟠
Staphylococcus aureus	6342	🟣🟡🟠	🟠	🟠
Staphylococcus epidermidis	17917	🟣🟡🟠	🟠	🟠
Staphylococcus sp.	13565	🟣🟡🟠	🟠	🟡🟠
Mycobacterium smegmatis	19420	🟣🟡🟠	🟡🟠	🟡🟠
Listeria monocytogenes	13932	🟣🟡🟠	🟡🟠	🟣🟡🟠
Streptococcus pyogenes	7958	🟠	🟠	🟠
Streptococcus mitis	903	🟠	🟠	🟠
Streptococcus sp.	12403	🟠	🟠	🟠
Bacillus anthracis	14578	🟠	🟡🟠	🟡🟠
Gram Negative				
Alcaligenes tolerans	19359	🟣🟡🟠	🟡🟠	🟣🟡🟠
Neisseria gonorrhoeae	19424	🟡🟠	🟠	🟠
Neisseria menigitidis	13077	🟣🟡🟠	🟠	🟠
Proteus vulgaris	8427	🟣🟡🟠	🟠	○
Escherichia coli	10536	🟠	○	○
Escherichia coli	11229	🟠	○	○
Escherichia coli	11698	🟠	○	○
Klebsiella pneumoniae	12833	🟠	○	○
Salmonella typhi	9993	🟠	○	○
Salmonella typhi	6539	🟠	○	○
Salmonella typhimurium	13311	🟠	○	○
Herellea sp.	11959	🟠	○	○
Pseudomonas aeruginosa	10145	○	○	○
Pseudomonas aeruginosa	7700	○	○	○
Pseudomonas aeruginosa	9027	○	○	○
Pseudomonas aeruginosa	14210	○	○	○
Proteus rettgeri	9250	○	○	○
Proteus morganii	9237	○	○	○

KEY: ZONE OF INHIBITION
🟣🟡🟠 = 18.0 mm or larger
🟡🟠 = 12.0 mm to 17.9 mm
🟠 = Less than 11.9 mm
○ = No Inhibition

Test Method: The three antibacterial soaps were evaluated by means of the standard Protein Adsorption Test, conducted by a recognized independent laboratory, using A.T.C.C. organisms.

*The bacteria were those most frequently named in a nationwide survey of 334 hospitals.



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After 1 1/2 hours in the tunnel, 'we were glad to be out'

(Prepared with the aid of the Port Huron *Times Herald.)*

Within 15 minutes from the time the disaster alert was sounded, 30 physicians were standing ready to treat casualties from the Detroit Metropolitan Water System tunnel explosion near Port Huron Dec. 11.

Medical staff, administrators, volunteers and others responded at Port Huron, Port Huron Mercy and St. Clair River District hospitals when their disaster plans went into effect. Emergency crews from St. Clair, Lapeer and Sanilac counties, including 25 ambulances, were dispatched to the scene.

And four local physicians actually went to the tunnel entrance on the shore of Lake Huron at Lakeport. Two went down to the bend in the tunnel where the dead and injured were found, to help relieve the suffering of the workers trapped 238 feet below the surface.

"We needed those doctors," said St. Clair County Undersheriff Norman L. Ludy, who conducted the rescue operation. "The men trapped in the tunnel needed them."

The first word Port Huron Hospital had of the disaster was that it should prepare to receive from 40 to 60 casualties. Within 15 minutes of their calls to the physicians, 30 doctors were at the hospital, ready to help, according to Charles McKinley, administrator.

"We had pediatricians, obstetricians and psychiatrists—fellows who just came in because they have compassion for their fellow human beings in times like this," said Mr. McKinley. "The attitude and response of the medical staff in handling the casualties reflected a beautiful community spirit and dedication."

The final count was 21 dead and nine injured in the tunnel blast. All but one were brought to Port Huron Hospital.

Following is the personal account of the disaster by one of the two physicians to enter the tunnel:

Dr. E. D. Shoudy's eyewitness account of Port Huron tunnel disaster

By Elmore D. Shoudy, MD
Port Huron

At about 3 P.M. on December 11, 1971, an explosion occurred, possibly of methane gas, in a tunnel a few miles north of Port Huron, Michigan. Two hours later I was on my way down into the tunnel.

This tunnel is being built under the lake by the Detroit Metropolitan Water Works to bring water to the Detroit area. The tunnel is to be connected to a water intake cofferdam in Lake Huron about 5 to 6 miles from shore.

I was covering calls for two of my general practice colleagues and myself on this nice Saturday afternoon.

As I called into the hospital regarding a patient, the operator notified me that our disaster plan was in effect for the hospital and that all physicians were to come to the Port Huron General Hospital.

Doctors and a volunteer fireman bring another body into Port Huron General Hospital Dec. 12 following the water tunnel explosion north of the city.

World Wide Photos

Doctor Shoudy

We have two hospitals in town with a 400 bed capacity but the General is the largest and we have a new addition recently completed that includes an emergency care section.

At the hospital, numbers of physicians were on hand. All sections had been alerted under the direction of Mr. McKinley, our administrator. No patients had arrived as yet but preparations were in progress.

Our big problem seemed to be communication. The variation in estimated numbers of injuries and fatalities ranged to 60 persons. We were notified that men were trapped in the tunnel and some couldn't be brought to the surface for four to five hours.

Many of the physicians waited and then went to their homes to await further call. After seeing some patients in the hospital, I returned to the Emergency Room.

A call from the sheriff on the scene requested an MD volunteer to go into the tunnel and give pain relief to the trapped injured men. Our chief of staff asked for a volunteer, but I suggested two because of the possible number of casualties. Gordon Rady, a local pediatrician, and I volunteered and quickly arranged a small collection of things we might need.

Within minutes a city police car was at the hospital door and we were on our way. The harrowing ride in the police car kept us on the edge of our seats and didn't allow us time to think of the upcoming task. But the smoothness of the handling of the situation by police, firemen, and workers at the tunnel eased our fears. At the site, the elevator awaited us. We passed a blur of people on either side—they were the families and friends awaiting the injured and possibly dead.

We rode the elevator down the 230-foot shaft. At the base we could see the tunnel. It was about 16 feet wide, with covered concrete walls, and was lighted by multiple electric bulbs. The base had train tracks and a small train car awaited us. We climbed on top and dressed in two gowns that I had brought along. Men were coming out on stretchers as we went in. The train carried us to the edge of the debris. Here, also, the lights stopped. Floodlights became the only lights.

The explosion had apparently occurred deeper in the tunnel and carried the twisted ventilator pipes (like large culverts) many feet down the tunnel. The twisted and torn pipes almost obliterated the shaft in areas.

We climbed through debris, walked on pipes and the sides of the walls and on the tracks section which was covered with mud and water a few inches deep. The concrete walls were damp and a foggy mist filled the air.

As we made our way, the workers helped us along the route. They mentioned that this or that piece of equipment had been 1,000 feet further up the tunnel. Finally, after traveling what seemed miles, we reached our destination about one mile into the six mile tunnel.

The supervising staff was trying to clear the tunnel because, it was said, the gas was accumulating and another explosion was feared. Ambulance men and rescue workers were trying to carry the wounded men on stretchers over and out of the debris, a difficult task.

The injured men had black dirt and cement all over them. We gave them demerol injections as we deemed necessary, being careful to place adhesive tape on their foreheads with time and dosage, in the old wartime fashion.

Our meager supplies couldn't handle the situation, except to relieve pain. Burns weren't apparently the largest injuries. The twisted metal and exploding pieces had lacerated the bodies of the living and the dead. Fractures, torn limbs and lacerations were the prime concern.

A couple of ambulance boys had told us all the rest were dead but we felt that we had to see if any flicker of life remained in the large number of bodies remaining. Most of the dead required no close observation.

Parts of bodies were everywhere. We checked them and counted as we returned. We counted 17 bodies but some were difficult to tell if they were parts of one or another.

The long path back was helped by the courageous rescuers. At the end of the track the elevator awaited us and we loaded the last injured man. Our ambulance had some minor headlight problems as we rode to the hospital but the state police car parted the traffic as we rode.

We had been 1½ hours in the tunnel and were glad to be out. Gordon said the heavy office load would seem easier after this. At the hospital the E. R. was busy. We had called in some directions in the ambulance and they were ready.

The response of our staff was tremendous. It can best be shown by realizing the first men were treated by three OB-Gyn men and one psychiatrist. The nursing crew, O.R. crew, and entire hospital staff seemed to be there. The coffee seemed refreshing.

A crowd of people had been waiting, mostly relatives. After our report, the administrator had the unhappy task of informing the people that no more survivors were there. A list of names had been made of the injured. The dead were brought up later that night and after considerable examinations, a total of 21 bodies were identified, and placed in the temporary morgue set up according to the disaster plan.

The injured were treated accordingly, some requiring major surgery, most requiring repair of multiple lacerations and cleansing of wounds and bodies. "Form oil" mixed with cement, dust and dirt was almost impossible to clean off.

A later meeting of our medical staff executive committee brought out discrepancies and problems in our present disaster plan and in the handling of the situation. Communications with the tunnel site and police were definitely needed. In the future, two-way communications and police monitoring equipment will be available at the hospital. We have decided an observer, perhaps a physician, should be sent to the site to determine the number and type of injuries that we may encounter. In this way other hospitals, burn centers, etc., could be prepared. The observing physician that is to offer treatment at the scene should have a shoulder bag similar to the army medics' equipment.

We believe for the handling of casualties, our triage screening should be improved, and possibly a scribe assigned to each patient-case to keep a chart. Our tagging system didn't seem to work well. An overall disaster leader was suggested to make alterations and assignments so that physician direction could best be utilized. Many unauthorized personnel, such as newsmen, etc., complicated activities in the emergency suite. Plans for advising the families and news media need improvement.

Our morgue was adequate for the number of bodies, but a larger disaster may have overwhelmed it. It has become evident that a disaster plan should include more of the community and the community's facilities.

In all, our physician, nursing and personnel response was tremendous and we are proud of the hospital's response.

Last and not least, we couldn't be more proud of the community people that helped. The fire department, ambulance crews, sheriff, police and individual workers showed that a city can and did respond wholeheartedly in the disaster.

Established 1924

MERCYWOOD HOSPITAL

4038 Jackson Road **Conducted by Sisters of Mercy** **Ann Arbor, Michigan**

Telephone — 313 663-8571

Mercywood MERCY

Mercywood Hospital is a private neuropsychiatric hospital licensed by the Michigan Department of Mental Health. Mercywood specializes in intensive, multi-disciplinary treatment for emotional and mental disorders.

Accredited by the Joint Commission on Accreditation of Hospitals and the National League of Nursing. A full Blue Cross participating hospital.

Certified for: Medicare and M.A.A. programs

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In small doses

Eleven Michigan MDs serving AMA

Eight Michigan physicians have been reappointed to serve on councils or committees of the American Medical Association. Another two have been newly appointed, while one has retired.

Harold F. Falls, MD, Ann Arbor, has retired from his service with the AMA Council on Health Manpower. Robert E. Rice, MD, Greenville, is a new appointee to the Council on Rural Health, and Everett R. Harrell, MD, Ann Arbor, to the Committee on Cutaneous Health and Cosmetics.

Reappointed are Herbert A. Raskin, MD, Southfield, chairman and Maurice H. Seevers, MD, Ann Arbor, Committee on Alcoholism and Drug Dependence; Starling D. Steiner, MD, Detroit, Council on Occupational Health; Bertram D. Dinman, MD, Ann Arbor, Committee on Occupational Toxicology; Donald N. Sweeny, Jr., MD, Detroit, Disability Insurance Claims Review Committee; William W. Jack, MD, Grand Rapids, Committee on Maternal and Child Care; Richard C. Schneider, MD, Ann Arbor, Committee on Medical Aspects of Sports, and Alexander H. Hirschfeld, MD, Detroit, chairman, Joint Committee on Mental Health in Industry.

The new dean of the WSU School of Medicine, Robert D. Coye, MD, told the press soon after his appointment that he sees the role of the WSU medical school in "making our interest that of medical care for the entire community. This . . . is a new direction for medical education." He meets with, from left above, Lawrence M. Weiner, PhD, acting associate dean; Paul J. Pentecost, director of WSU Information Services, and George E. Gullen, Jr., acting WSU president.

Richard C. Bates, MD, Lansing,
is a new appointee, pending Senate confirmation, to the Advisory Commission on Drug Abuse and Alcoholism for a term expiring Feb. 1, 1974. Doctor Bates, who was appointed by Gov. William G. Milliken, is chairman of the MSMS Committee on Alcohol and Drug Dependence and is director of the Alcoholism Treatment Unit at E. W. Sparrow Hospital, Lansing.

Henry Green, MD, Detroit
director of the Cardiac Care Surveillance Project of the Michigan Heart Association, led a study group which has just published guidelines on the safe use of electronic equipment in hospitals. The study group was a part of the Inter-Society Commission for Heart Disease Resources and based its recommendations on studies of 19 hospital surveys in Detroit. The recommendations were published in *Circulation,* a scientific journal of the American Heart Association.

Jose J. Llinas, MD, Lansing,
director of the Tri-County Mental Health Service serving Ingham, Clinton and Eaton counties, is author of a new column on mental health and understanding which has been appearing in the weekly Clinton County *News* since January. Doctor Llinas is also writer of a monthly column on mental health for the bulletin of the Ingham County Medical Society.

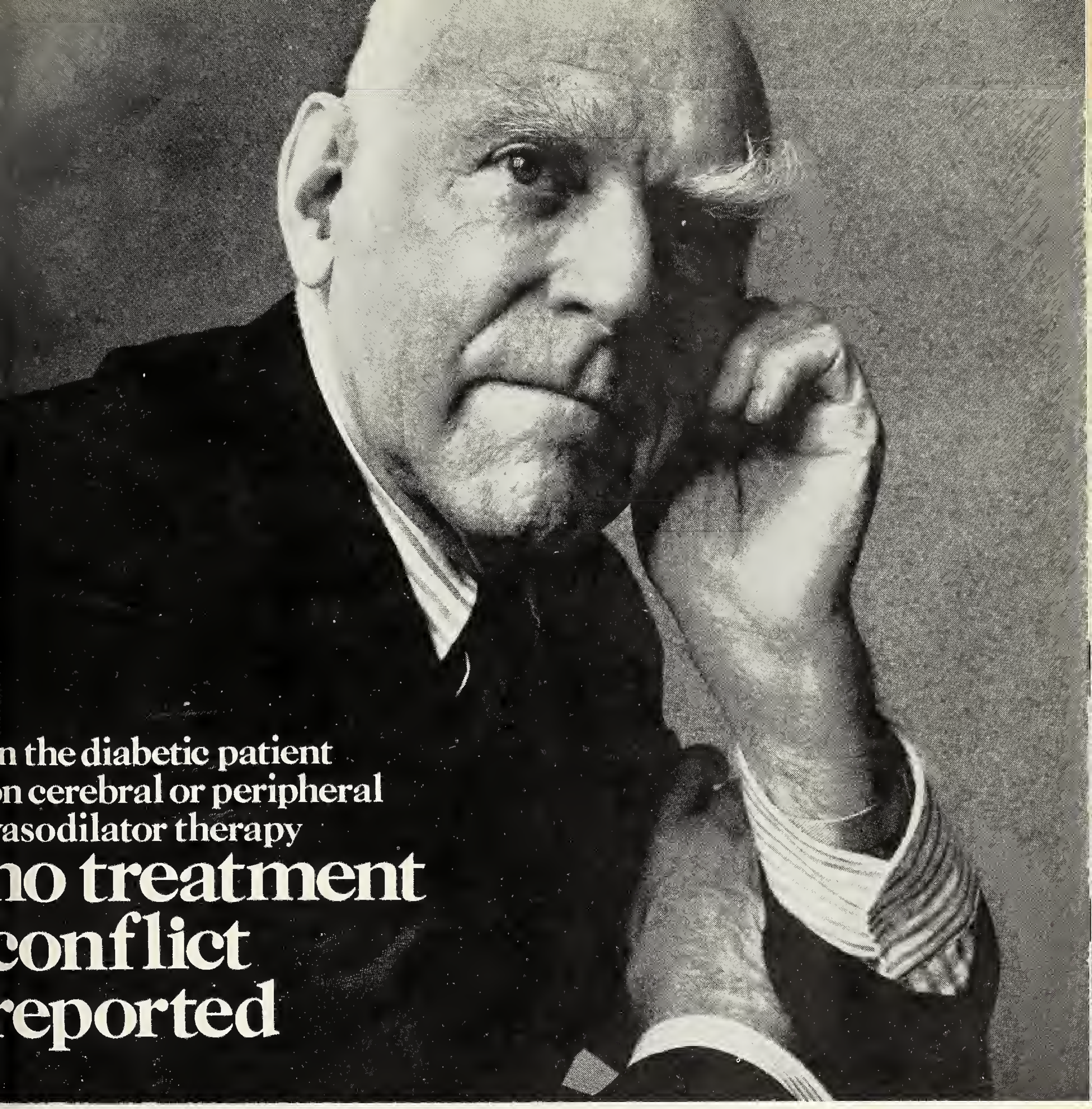
Stevo Julius, MD, Ann Arbor,
an associate professor of internal medicine at the University of Michigan, is a new member of the Medical Advisory Board of the Council for High Blood Pressure of the American Heart Association. He is the second practicing physician from Michigan to be named to the board.

R. G. Lynch, MD, Grosse Pointe Park,
is new director of employee medical services for the Parke Davis Company. He succeeds H. C. Bruckner, MD, who resigned.

Harold J. Meier, MD, Coldwater,
is the outstanding citizen of the year in his community. He was named at the annual president's ball of the Coldwater Chamber of Commerce. Doctor Meier, an orthopedic surgeon in Coldwater since 1936, is a former chairman of The MSMS Council, and former recipient of the MSMS Certificate of Commendation.

Russell F. Salot, MD, Mt. Clemens,
received 1,000 birthday cards from grateful patients on his 70th birthday Jan. 4. Doctor Salot was chief surgeon at Mt. Clemens' St. Joseph Hospital for many years. The city's mayor proclaimed Jan. 3-9 as Dr. Russell F. Salot Week in honor of the surgeon who is so loved by his community.

(Continued on page 256)



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ISOXSUPRINE HCl)
he compatible vasodilator

- no interference with diabetic control . . . does not alter carbohydrate metabolism.[1]
- conflicts have not been reported with diuretics, corticosteroids, antihypertensives or miotics.

There are no known contraindications in recommended oral doses other than it should not be given in the presence of frank arterial bleeding or immediately postpartum.

lthough not all clinicians agree on the value of vasodilators in vascular disease, several investigators[2-5] have reported favorably on the effects isoxsuprine. Effects have been demonstrated both by objective measurement[3,5] and observation of clinical improvement.[2,4]
dications: Cerebrovascular insufficiency, arteriosclerosis obliterans, diabetic vascular diseases, thromboangiitis obliterans (Buerger's disease), aynaud's disease, postphlebitic conditions, acroparesthesia, frostbite syndrome and ulcers of the extremities (arteriosclerotic, diabetic, thrombotic). **Composition:** VASODĪLAN tablets, isoxsuprine HCl 10 mg. and 20 mg. **Dosage:** Oral—10 to 20 mg. t.i.d. or q.i.d. **Contraindications and autions:** There are no known contraindications to recommended oral dosage. Do not give immediately postpartum or in the presence of rterial bleeding. **Side Effects:** Occasional palpitation and dizziness can usually be controlled by dosage reduction. Complete details available product brochure from Mead Johnson Laboratories. **References:** (1) Samuels, S. S., and Shaftel, H. E.: J. Indiana Med. Ass. *54*:1021-1023 (July) 1961. (2) Clarkson, I. S., and LePere, D. M.: Angiology *11*:190-192 (June) 1960. 3) Horton, G. E., and Johnson, P. C., Jr.: Angiology *15*:70-74 (Feb.) 1964. (4) Dhrymiotis, A. D., and Whittier, J. R.: urr. Ther. Res. *4*:124-128 (April) 1962. (5) Whittier, J. R.: Angiology *15*:82-87 (Feb.) 1964.

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Harvey V. Sparks, MD, Ann Arbor,
associate professor of physiology, has been granted $24,310 by the National Heart and Lung Institute for research on "Dynamics of Metabolic Control of Muscle Blood Flow."

Garfield Tourney, MD, Grosse Pointe,
is new chief of the Department of Psychiatry at Harper Hospital, Detroit. He has responsibility also as co-chairman of the Department of Psychiatry at the WSU School of Medicine.

Charles C. Vincent, MD, Detroit,
is new secretary of the Board of Trustees of the Detroit Department of Hospitals. Doctor Vincent was appointed last month to a four-year term on the board. He also serves as a member of the Mayor's Health Care Advisory Commission, on the Detroit Board of Health and on the faculty of Wayne State University School of Medicine.

Two Michigan physicians
were re-elected to the board of directors of the American College of Emergency Physicians at the ACEP annual meeting in Miami recently. They are Eugene C. Nakfoor, MD, Lansing, chief of staff of St. Lawrence Hospital there; and John H. van de Leuv, MD, Lake Orion, editor of the ACEP journal and a founding member.

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ANTACID
Write for Clinical Samples
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Daniel J. Wilhelm, MD, Port Huron,
is the outstanding young man of his community. A Port Huron pediatrician since 1966, Doctor Wilhelm was named by the local Jaycees at a recent banquet. Doctor Wilhelm is a member of the MSMS House of Delegates. He was first chairman of the Human Development Committee of the Port Huron Area School District, and is on the boards of the local Anonymous Information on Drugs program, the Rehabilitation Action Program, the Port Huron YMCA and the Catholic Social Services.

Doctors Reizen, Priver and Tobin on review board

Three MSMS members are among the nine persons named by Gov. William G. Milliken to a board to review requests by hospitals, nursing homes and other health care institutions that they be allowed to exceed the 6 per cent price limit established by the U. S. Price Commission.

The price commission has asked all U. S. governors to appoint such a board.

New Michigan board members, named from the Comprehensive State Health Planning Advisory Council, are Maurice S. Reizen, MD, Okemos, director, Michigan Department of Public Health; Julien Priver, MD, Detroit, president, Michigan Hospital Association, and James Tobin, MD, Ishpeming.

SOME PHYSICIANS KNOW what to do with their patients who are alcoholics or problem drinkers.

SOME PHYSICIANS WISH they knew what to do with them.

Have you thought of the Alcoholism Services of the Battle Creek Sanitarium Hospital? Since 1965 we have maintained an enviable record in the rehabilitation of the alcoholic or problem drinker.

A full range of services and specialties.

Give us a call
616-964-7121 Ext. 588 or 589

Battle Creek Sanitarium and Hospital
197 N. Washington Avenue
Battle Creek, Michigan 49016

"The biggest gathering ever" participated in the special meeting called recently in Ann Arbor for interested medical students by the Michigan Academy of Family Physicians. The crowd of more than 700 included students from the three medical schools and the 160 GPs who were enrolled in the week-long GP course at Towsley Center.

National president of family physicians visits Ann Arbor

Jerome J. Wildgen, MD, left, president of the National Academy of Family Physicians, who gave the major address to the students and GPs, confers with George A. Dean, MD, Southfield, the Michigan GP public relations chairman.

Roy J. Gerard, MD, left, tells two students about the general practice residency program he directs at Saginaw.

The president of the Michigan Academy of Family Physicians, Joseph V. Fisher, MD, standing, Chelsea, stops during the Ann Arbor meeting to visit with some students to urge them to consider careers in family practice.

County scenes

Ingham's 'Medicina' has wide distribution in January

Circulation of the January issue of *Medicina*, the bulletin of the Ingham County Medical Society, was double the usual distribution figure. That bulletin contained a succinct, informative explanation of the aims and issues of the proposed MSMS foundation, written by John (Jack) Kantner, ICMS executive director. MSMS ordered 500 copies of that *Medicina* and distributed them to all delegates, alternate delegates and selected committee members. The Oakland County Medical Society reprinted the article in their February issue.

Oakland society growing

The Oakland County Medical Society membership has increased to 736 physicians, which allows it to have an additional delegate and alternate delegate to MSMS. The Oakland delegates and alternates now total 15 each. The membership rose from 724 last year to 736 in 1972.

Eight senior doctors honored by Kent

Each year the members of the Kent County Medical Society honor senior members for their services to society and the practice of the science of medicine. At this year's annual Kent Society meeting Jan. 12 the physicians recognized Ruth Herrick, MD; Aleksandrs Kalnins, MD; Cornetta G. Moen, MD; Arthur M. Moll, MD; Arthur H. Mollmann, MD; Cullen E. Sugg, MD; John Ten Have, MD, and Athol B. Thompson, MD.

"Voltlamp" donated to WCMS Beaumont Room

The Beaumont Room of the Wayne County Medical Society, which contains a historical collection of medical books and memorabilia has added a "Voltlamp" to its attractions. The "Voltlamp" was popular in the 1920's to produce faradic and galvanic currents. The Beaumont Room's model was donated by Mrs. Carleton Fox, widow of a late Birmingham dentist. Its manufacturer stated that "Electricity cures. We do not claim, that of itself electricity will cure every and all forms of human weakness and disease. But we do claim that, properly used, electricity is one of the best possible curative agents known to man: that of all the remarkable achievements of this great and mysterious force, the greatest is its wonderful power to alleviate pain, to cure disease and to save life."

Pre-Sate®
(chlorphentermine HCl)
CAUTION: Federal law prohibits dispensing without prescription.
Indications: Pre-Sate (chlorphentermine hydrochloride) is indicated in exogenous obesity, as a short term (*i.e.*, several weeks) adjunct in a regimen of weight reduction based upon caloric restriction.
Contraindications: Glaucoma, hyperthyroidism, pheochromocytoma, hypersensitivity to sympathomimetic amines, and agitated states. Pre-Sate (chlorphentermine hydrochloride) is also contraindicated in patients with a history of drug abuse or symptomatic cardiovascular disease of the following types: advanced arteriosclerosis, severe coronary artery disease, moderate to severe hypertension, or cardiac conduction abnormalities with danger of arrhythmias. The drug is also contraindicated during or within 14 days following administration of monamine oxidase inhibitors, since hypertensive crises may result.
Warnings: When weight loss is unsatisfactory the recommended dosage should not be increased in an attempt to obtain increased anorexigenic effect; discontinue the drug. Tolerance to the anorectic effect may develop. Drowsiness or stimulation may occur and may impair ability to engage in potentially hazardous activities such as operating machinery, driving a motor vehicle, or performing tasks requiring precision work or critical judgment. Therefore, such patients should be cautioned accordingly. Caution must be exercised if Pre-Sate (chlorphentermine hydrochloride) is used concomitantly with other central nervous system stimulants. There have been reports of pulmonary hypertension in patients who received related drugs.
Drug Dependence: Drugs of this type have a potential for abuse. Patients have been known to increase the intake of drugs of this type to many times the dosages recommended. In long-term controlled studies with high dosages of Pre-Sate, abrupt cessation did not result in symptoms of withdrawal.
Usage In Pregnancy: The safety of Pre-Sate (chlorphentermine hydrochloride) in human pregnancy has not yet been clearly established. The use of anorectic agents by women who are or who may become pregnant, and especially those in the first trimester of pregnancy, requires that the potential benefit be weighed against the possible hazard to mother and child. Use of the drug during lactation is not recommended. Mammalian reproductive and teratogenic studies with high multiples of the human dose have been negative.
Usage In Children: Not recommended for use in children under 12 years of age.
Precautions: In patients with diabetes mellitus there may be alteration of insulin requirements due to dietary restrictions and weight loss. Pre-Sate (chlorphentermine hydrochloride) should be used with caution when obesity complicates the management of patients with mild to moderate cardiovascular disease or diabetes mellitus, and only when dietary restriction alone has been unsuccessful in achieving desired weight reduction. In prescribing this drug for obese patients in whom it is undesirable to introduce CNS stimulation or pressor effect, the physician should be alert to the individual who may be overly sensitive to this drug. Psychologic disturbances have been reported in patients who concomitantly receive an anorexic agent and a restrictive dietary regimen.
Adverse Reactions: Central Nervous System: When CNS side effects occur, they are most often manifested as drowsiness or sedation or overstimulation and restlessness. Insomnia, dizziness, headache, euphoria, dysphoria, and tremor may also occur. Psychotic episodes, although rare, have been noted even at recommended doses. **Cardiovascular:** tachycardia, palpitation, elevation of blood pressure. **Gastrointestinal:** nausea and vomiting, diarrhea, unpleasant taste, constipation. **Endocrine:** changes in libido, impotence. **Autonomic:** dryness of mouth, sweating, mydriasis. **Allergic:** urticaria. **Genitourinary:** diuresis and, rarely, difficulty in initiating micturition. **Others:** Paresthesias, sural spasms.
Dosage and Administration: The recommended adult daily dose of Pre-Sate (chlorphentermine hydrochloride) is one tablet (equivalent to 65 mg chlorphentermine base) taken after the first meal of the day. Use in children under 12 not recommended.
Overdosage: Manifestations: Restlessness, confusion, assaultiveness, hallucinations, panic states, and hyperpyrexia may be manifestations of acute intoxication with anorectic agents. Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension, or hypotension and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Fatal poisoning usually terminates in convulsions and coma.
Management: Management of acute intoxication with sympathomimetic amines is largely symptomatic and supportive and often includes sedation with a barbiturate. If hypertension is marked, the use of a nitrate or rapidly acting alpha-receptor blocking agent should be considered. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendations in this regard.
How Supplied: Each Pre-Sate (chlorphentermine hydrochloride) tablet contains the equivalent of 65 mg chlorphentermine base; bottles of 100 and 1000 tablets.
Full information available on request.

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for the practical generation
Pre-Sate®
(chlorphentermine HCl)

the trend is toward our kind of anorectic

Not a controlled drug under the Comprehensive Drug Abuse Prevention and Control Act

- low potential for abuse
- less CNS stimulation than with d-amphetamine or phenmetrazine

Effective anorectic adjunct to your program of caloric restriction and diet re-education

- weight loss comparable to d-amphetamine and phenmetrazine, superior to placebo
- convenient one-a-day dosage

GP-21-B/W

Pre-Sate® (chlorphentermine HCl)...the increasingly practical appetite suppressant

What makes 'Deprol' useful for depressed geriatric patients... makes it useful for younger patients as well

- helps ease mild to moderate nonpsychotic depression *and* related anxiety
- helps assure a good night's rest

The middle-aged housewife who can't stop feeling "blue," who worries about losing her attractiveness yet neglects her appearance; reports vague aches and pains, difficulty sleeping, loss of appetite.

INDICATIONS: Useful in the management of depression, both acute (reactive) and chronic; particularly useful in the less severe depressions and where the depression is accompanied by anxiety, insomnia, agitation, or rumination; also useful for management of depression and associated anxiety accompanying or related to organic illnesses.

CONTRAINDICATIONS: Benactyzine hydrochloride: Glaucoma and previous allergic or idiosyncratic reactions to benactyzine hydrochloride or related compounds. **Meprobamate:** Acute intermittent porphyria and allergic or idiosyncratic reactions to meprobamate or related compounds such as carisoprodol, mebutamate, tybamate, carbromal.

WARNINGS: The following information on meprobamate pertains to 'Deprol' (meprobamate + benactyzine hydrochloride): **Meprobamate:** *Drug Dependence:* Physical and psychological dependence and abuse have occurred. Chronic intoxication, from prolonged use and usually greater than recommended doses, leads to ataxia, slurred speech, vertigo. Carefully supervise dose and amounts prescribed, and avoid prolonged use, especially in alcoholics and addiction-prone persons. Sudden withdrawal after prolonged and excessive use may precipitate recurrence of pre-existing symptoms (e.g., anxiety, anorexia, insomnia) or withdrawal reactions (e.g., vomiting, ataxia, tremors, muscle twitching, confusional states, hallucinosis; rarely convulsive seizures, more likely in persons with CNS damage or pre-existent or latent convulsive disorders). Therefore, reduce dosage gradually (1-2 weeks) or substitute a short-acting
barbiturate, then gradually withdraw. *Potentially Hazardous Tasks:* Drivi
a motor vehicle or operating machinery. *Additive Effects:* Possible ac
tive effects between meprobamate, alcohol, and other CNS depressa
or psychotropic drugs. *Pregnancy and Lactation:* Safe use not establishe
weigh potential benefits against potential hazards in pregnancy, nursi
mothers, or women of childbearing potential. Animal data at five tim
the maximum recommended human dose show reduction in litter s
due to resorption. Meprobamate appears in umbilical cord blood at
near maternal plasma levels, and in breast milk at levels 2-4 times th
of maternal plasma. *Children Under Six:* Drug not recommended.

PRECAUTIONS: Meprobamate: To avoid oversedation, use lowest eff
tive dose, particularly in elderly and/or debilitated patients. Consider p
sibility of suicide attempts; dispense least amount of drug feasible at a
one time. To avoid excess accumulation, use caution in patients with co
promised liver or kidney function. Meprobamate may precipitate seizu
in epileptics.

ADVERSE REACTIONS: Nausea, dry mouth, other g.i. symptoms; s
cope; one case each of severe nervousness and loss of power of conc
tration. The following side effects, which have occurred after administrati
of its components alone, have either occurred or might occur when t
combination is taken. **Benactyzine hydrochloride:** Benactyzine hyd
chloride alone, particularly in high dosage, may produce dizziness, thoug
blocking, a sense of depersonalization, aggravation of anxiety, or dis

When mild depression
and associated anxiety
interfere with living

DEPROL®

(meprobamate 400 mg +
benactyzine hydrochloride 1 mg)

The junior executive crushed by his repeated failure to be promoted and anxious about the future; complains to you of listlessness, early-morning awakening.

The young widow whose grief has persisted too long, is pessimistic and fearful about what lies ahead, has lost interest in everything; is preoccupied with vague physical ailments, has crying spells.

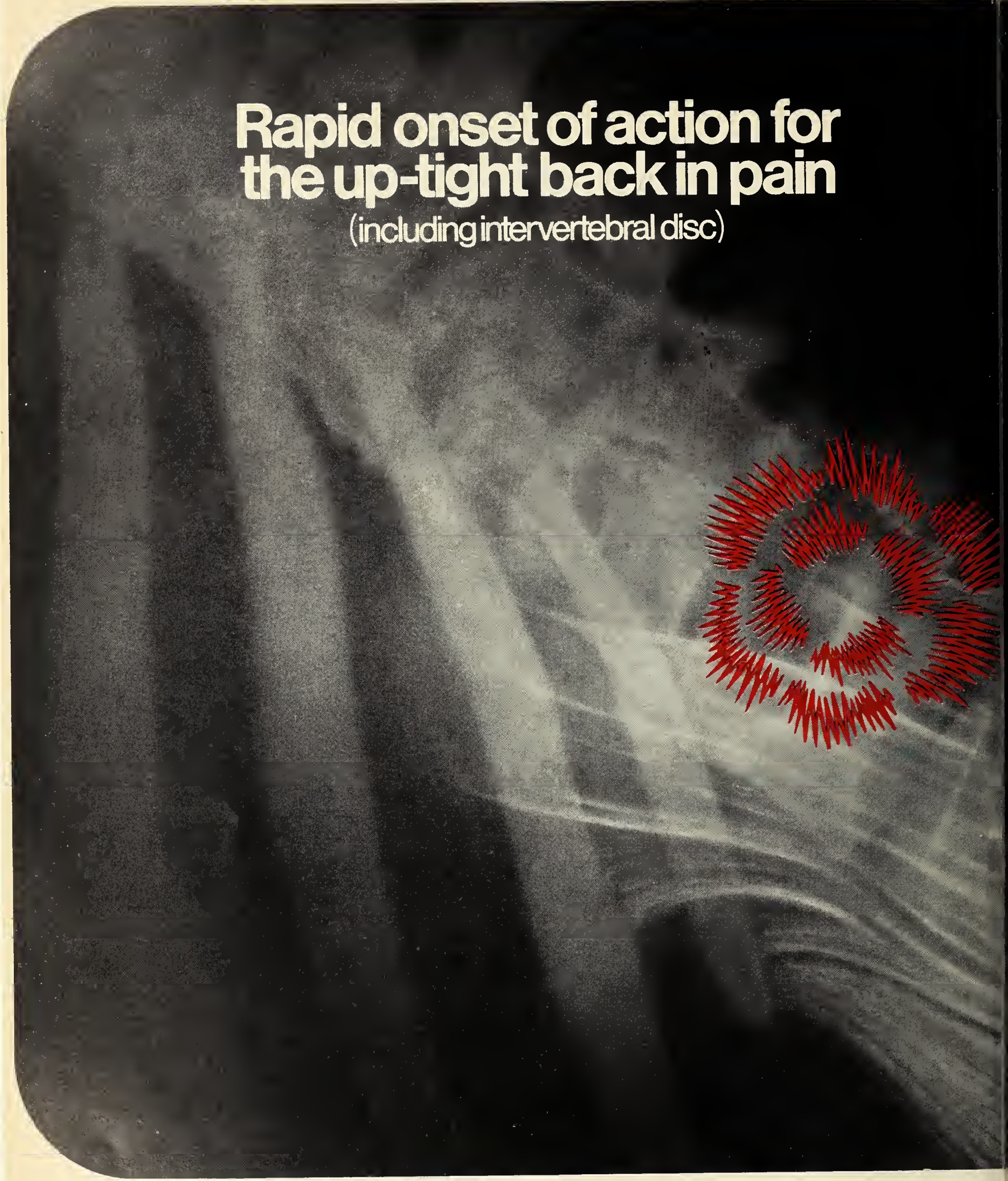
ance of sleep patterns, and a subjective feeling of muscle relaxation.
here may also be anticholinergic effects such as blurred vision, dryness
f mouth, or failure of visual accommodation. Other reported side effects
ave included gastric distress, allergic response, ataxia, and euphoria.
leprobamate: *Central Nervous System:* Drowsiness, ataxia, dizziness,
lurred speech, headache, vertigo, weakness, paresthesias, impairment of
isual accommodation, euphoria, overstimulation, paradoxical excite-
nent, fast EEG activity. *Gastrointestinal:* Nausea, vomiting, diarrhea. *Car-*
liovascular: Palpitations, tachycardia, various forms of arrhythmia, tran-
sient ECG changes, syncope; also, hypotensive crises (including one fatal
case). *Allergic or Idiosyncratic:* Usually after 1-4 doses. Milder reactions:
tchy, urticarial, or erythematous maculopapular rash (generalized or
confined to groin). Others: leukopenia, acute nonthrombocytopenic pur-
ura, petechiae, ecchymoses, eosinophilia, peripheral edema, adenopa-
hy, fever, fixed drug eruption with cross reaction to carisoprodol, and
cross sensitivity between meprobamate/mebutamate and meprobamate/
carbromal. More severe, rare hypersensitivity: hyperpyrexia, chills, angio-
eurotic edema, bronchospasm, oliguria, anuria, anaphylaxis, erythema
multiforme, exfoliative dermatitis, stomatitis, proctitis, Stevens-Johnson
syndrome; bullous dermatitis (one fatal case after meprobamate plus
rednisolone). Stop drug, treat symptomatically (e.g., possible use of
epinephrine, antihistamines, and in severe cases corticosteroids). *Hema-*
ologic: Agranulocytosis and aplastic anemia (rarely fatal), but no causal
relationship established. Rarely, thrombocytopenic purpura. *Other:* Exacerbation of porphyric symptoms.

USUAL ADULT DOSAGE: One tablet three or four times daily, which may be increased gradually to six tablets daily and gradually reduced to maintenance levels upon establishment of relief. Doses above six tablets daily are not recommended.

OVERDOSAGE: Overdosage of 'Deprol' (meprobamate + benactyzine hydrochloride) has not differed substantially from meprobamate overdosage: **Meprobamate:** Suicidal attempts with meprobamate, alone or with alcohol or other CNS depressants or psychotropic drugs, have produced drowsiness, lethargy, stupor, ataxia, coma, shock, vasomotor and respiratory collapse, and death. Empty stomach, treat symptomatically; cautiously give respiratory assistance, CNS stimulants, pressor agents as needed. Meprobamate is metabolized in the liver and excreted by the kidney. Diuresis and dialysis have been used successfully. Carefully monitor urinary output; avoid overhydration; observe for possible relapse due to incomplete gastric emptying and delayed absorption. REV. 10/71

Before prescribing, consult package circular or latest PDR information.

WALLACE PHARMACEUTICALS, Cranbury, N.J. 08512


Rapid onset of action for the up-tight back in pain
(including intervertebral disc)

Indications: For symptomatic relief in conditions characterized by skeletal muscle spasm and mild to moderate pain.

Contraindications: Acute intermittent porphyria and allergic or idiosyncratic reactions to carisoprodol or related compounds such as meprobamate, mebutamate, tybamate.

Warnings: *Idiosyncratic Reactions:* Rarely, first dose has been followed by extreme weakness, transient quadriplegia, dizziness, ataxia, temporary vision loss, diplopia, mydriasis, dysarthria, agitation, euphoria, confusion, disorientation. Symptoms usually subside during the next several hours. Supportive and symptomatic therapy, including hospitalization, may be necessary. *Pregnancy and Lactation:* Safe use not established; weigh potential benefits against potential hazards in pregnancy, nursing mothers, or women of childbearing potential. *Children Under Five:* Drug not recommended. *Potentially Hazardous Tasks:* Driving a motor vehicle or operating machinery. *Additive Effects:* Possible additive effects between carisoprodol, alcohol, and other CNS depressants or psychotropic drugs. *Drug Dependence:* Use cautiously in addiction-prone patients.

Precautions: To avoid excess accumulation, use caution in patients with compromised liver or kidney function.

Adverse Reactions: *Central Nervous System:* Drowsiness, dizziness, vertigo, ataxia, tremor, agitation, irritability, headache, depressive reactions, syncope, insomnia. *Allergic or Idiosyncratic:* Usually seen after 1-4 doses in patients not previously exposed, e.g., rash, erythema multiforme, pruritus, eosinophilia, fixed drug

Soma® 350
(carisoprodol)

Helps to...
- Relax muscle spasm
- Relieve associated mild-to-moderate pain
- Reduce stiffness

Helps give the patient...
- An opportunity to resume daily activities quickly

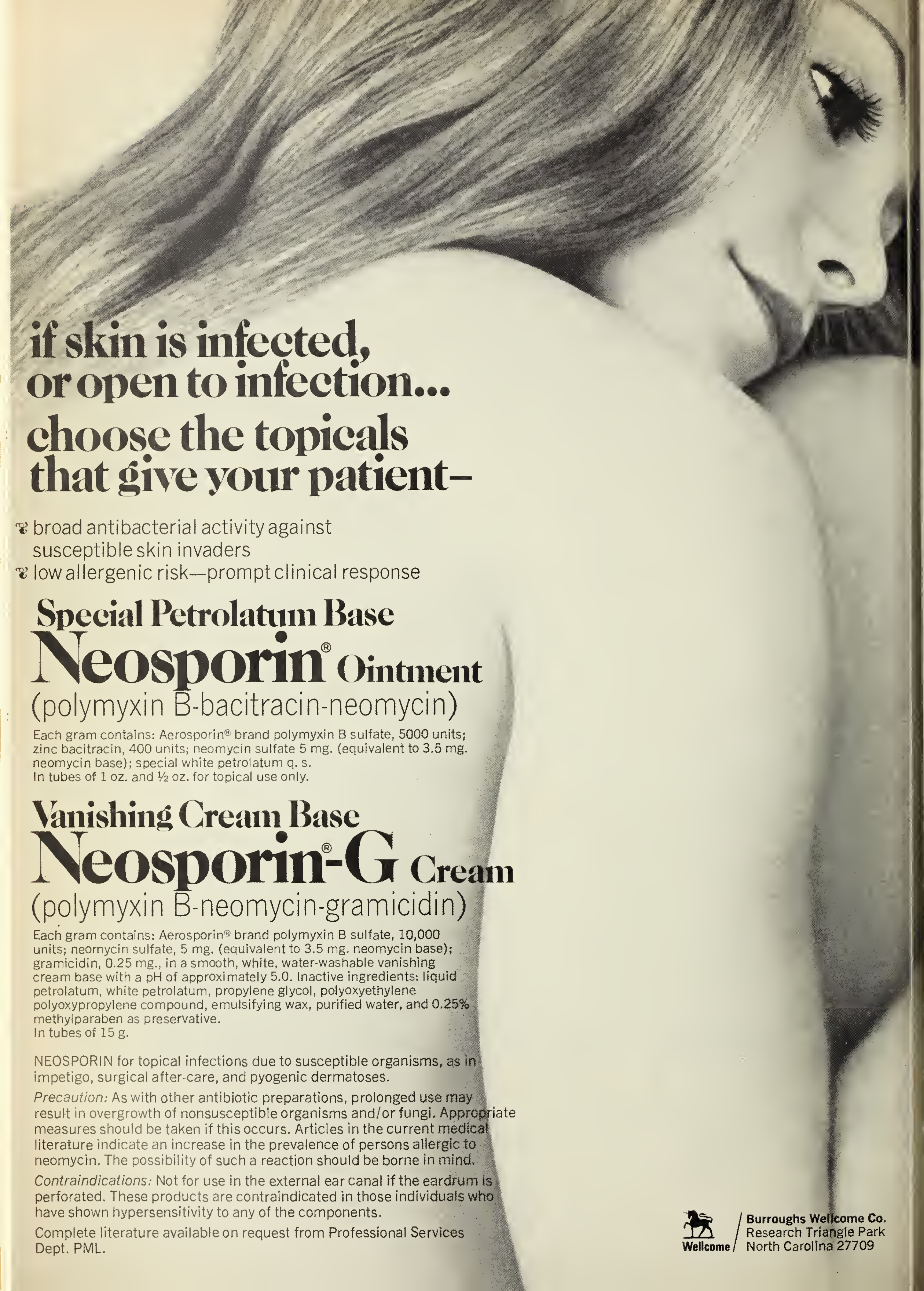
Simple, economical dosage schedule...
- Usual adult dosage: one 350 mg tablet q.i.d.

eruption with cross reaction to meprobamate. More severe manifestations: asthma, fever, weakness, dizziness, angioneurotic edema, smarting eyes, hypotension, anaphylactoid shock. Stop drug, treat symptomatically (e.g., possible use of epinephrine, antihistamines, and in severe cases corticosteroids). *Cardiovascular:* Tachycardia, postural hypotension, facial flushing. *Gastrointestinal:* Nausea, vomiting, hiccup, epigastric distress. *Hematologic:* Leukopenia and pancytopenia (on carisoprodol plus other drugs).

Usual Adult Dosage: One 350 mg tablet three times daily and at bedtime.

Overdosage: Has produced stupor, coma, shock, respiratory depression, and, very rarely, death. Overdosage of carisoprodol plus alcohol or other CNS depressants or psychotropic drugs can be additive. Empty stomach, treat symptomatically; cautiously give respiratory assistance, CNS stimulants, pressor agents as needed. Carisoprodol is metabolized in the liver and excreted by the kidney. Diuresis and dialysis have been used successfully with related drug meprobamate. Carefully monitor urinary output; avoid overhydration; observe for possible relapse due to incomplete gastric emptying and delayed absorption. REV. 10/71

WALLACE PHARMACEUTICALS / Cranbury, N.J. 08512



if skin is infected, or open to infection...

choose the topicals that give your patient–

- broad antibacterial activity against susceptible skin invaders
- low allergenic risk—prompt clinical response

Special Petrolatum Base

Neosporin® Ointment

(polymyxin B-bacitracin-neomycin)

Each gram contains: Aerosporin® brand polymyxin B sulfate, 5000 units; zinc bacitracin, 400 units; neomycin sulfate 5 mg. (equivalent to 3.5 mg. neomycin base); special white petrolatum q. s.
In tubes of 1 oz. and ½ oz. for topical use only.

Vanishing Cream Base

Neosporin®-G Cream

(polymyxin B-neomycin-gramicidin)

Each gram contains: Aerosporin® brand polymyxin B sulfate, 10,000 units; neomycin sulfate, 5 mg. (equivalent to 3.5 mg. neomycin base); gramicidin, 0.25 mg., in a smooth, white, water-washable vanishing cream base with a pH of approximately 5.0. Inactive ingredients: liquid petrolatum, white petrolatum, propylene glycol, polyoxyethylene polyoxypropylene compound, emulsifying wax, purified water, and 0.25% methylparaben as preservative.
In tubes of 15 g.

NEOSPORIN for topical infections due to susceptible organisms, as in impetigo, surgical after-care, and pyogenic dermatoses.

Precaution: As with other antibiotic preparations, prolonged use may result in overgrowth of nonsusceptible organisms and/or fungi. Appropriate measures should be taken if this occurs. Articles in the current medical literature indicate an increase in the prevalence of persons allergic to neomycin. The possibility of such a reaction should be borne in mind.

Contraindications: Not for use in the external ear canal if the eardrum is perforated. These products are contraindicated in those individuals who have shown hypersensitivity to any of the components.

Complete literature available on request from Professional Services Dept. PML.

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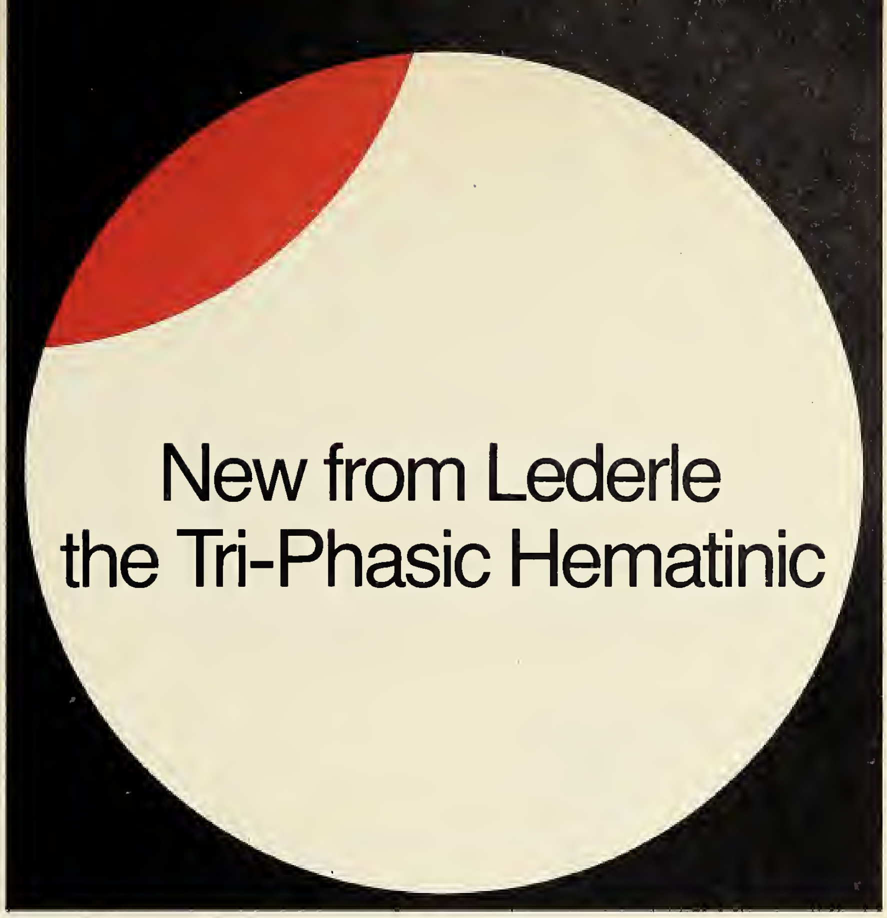
New from Lederle
the Tri-Phasic Hematinic

Specifically formulated with
vitamins and minerals important
in the treatment of anemia

PHASE 1

Enhanced Absorption

Each tablet provides 115 mg elemental iron as the highly absorbable ferrous fumarate *plus* 600 mg of Vitamin C.

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Each tablet provides Vitamin B_{12} (25 mcg) and Folic Acid (1 mg) to replace deficiencies.

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Each tablet contains:

Vitamin C (Ascorbic Acid)	600 mg.
Vitamin B_{12} (Cobalamin Concentrate, N.F.)	25 mcg.
Intrinsic Factor Concentrate	75 mg.
Folic Acid	1 mg.
Vitamin E (*d*-Alpha Tocopheryl Acid Succinate)	30 Int. Units
Elemental Iron (as present in 350 mg. of Ferrous Fumarate)	115 mg.
Dioctyl Sodium Sulfosuccinate U.S.P.	50 mg.

Dosage: One Tablet Daily.
Available in Bottles of 30 Tablets.
On Your Prescription Only.

Precautions: Some patients affected with pernicious anemia may not respond to orally administered Vitamin B_{12} with intrinsic factor concentrate and there is no known way to predict which patients will respond or which patients may cease to respond. Periodic examinations and laboratory studies of pernicious anemia patients are essential and recommended. If any symptoms of intolerance occur, discontinue drug temporarily or permanently. Folic acid, especially in doses above 1 mg. daily, may obscure pernicious anemia, in that hematologic remission may occur while neurological manifestations remain progressive.

Adverse Reactions: G.I.: nausea, vomiting, diarrhea, abdominal pain. Skin rashes may occur. Such reactions may necessitate temporary or permanent changes in dosage or usage. Allergic sensitization has been reported following both oral and parenteral administration of folic acid.

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Side effects: Blurred vision, dry mouth, dysuria, and other atropine-like side effects may occur at high doses, but are only rarely noted at recommended dosages.
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Spring peeper (tree frog, *Hyla crucifer*):
this small amphibian can expand
its throat membrane with air until it is
twice the size of its head.

County in the spotlight

Its membership at the helm, Genesee County Medical Society changes tack

By Jeanne Smith
Assistant, Department of Communication

New courses are being charted by the Genesee County Medical Society as the result of detailed, in-depth responses to a membership survey covering the society's services to its members and the community.

The survey came as a result of work of an ad hoc committee to seek solutions to poor participation in society activities and lack of effective action by what many called "paper" committees.

The membership survey was conducted last summer under the direction of James F. Dooley, MD, 1970-71 GCMS president, and Frederick VanDuyne, MD, reorganization committee chairman, and a detailed, 26-page report of findings issued in November to all members.

Under the direction of Richard L. Rapport, MD, now president of the society, changes are continuing toward goals expressed by the membership.

Society reorganization is progressing to gain greater representation and participation by members.

The former system of presidential appointment of committees has been changed. For the first time, members have been asked to volunteer for service on committees in which they have a particular interest. Committee chairmen for 1972 were elected rather than appointed by the president.

Articles of incorporation have been filed to create a corporation to provide new services to the community as well as to society members, a move gaining the approval of 62 per cent of the membership in the survey.

The society has taken on more active leadership in attacking drug problems in the Flint area.

Indications for future action not only on the activities of the Genesee County Medical Society but on the role of the society in the community are clearly indicated in the membership survey report.

The questionnaire, developed with the aid of the General Motors Institute in Flint, included 80 questions covering these areas: Attitudes Toward the Genesee County Medical Society, Services of the Society to its Members, Services of the Society to the Community, Society Reorganization and Future Trends.

Membership support was shown by an appropriation of $2,500 to cover cost of the survey and participation by more than 70 per cent of the society's 370 members.

Questionnaires were completed in interviews conducted by Flint public school teachers employed by the medical society and trained by the General Motors Institute. Doctor VanDuyne's committee made appointments for the hour-long interviews at each physician's convenience. The Hospital Computer Center of Flint computerized survey responses for incorporation into the report in percentage figures.

Both multiple choice and open end questions were included, the latter specifically to provide opportunity for expressing new ideas.

Here are hints for reorganization

Support of county society membership, both in appropriating necessary funds and in personal participation, are absolute necessities in collecting reliable data on views of members.

Once this support is gained and study guidelines established on the breadth of a study, it is time for a hard-working committee to take over and move forward.

Realistic planning to avoid unnecessary delay and loss of interest is always advisable.

Assistance such as the Genesee County Medical Society received from the General Motors Institute is extremely helpful in planning and conducting a broad survey. The Michigan State Medical Society Bureau of Economic Information will assist county societies in planning surveys.

Early preparation of a report and its distribution to all participants means early action on implementation.

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All Mudranes are bronchodilator-mucolytic in action, and are indicated for symptomatic relief of bronchial asthma, emphysema, bronchiectasis and chronic bronchitis. **MUDRANE tablets** contain 195 mg. potassium iodide; 130 mg. aminophylline; 21 mg. phenobarbital (Warning: may be habit-forming); 16 mg. ephedrine HCl. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions** are those for aminophylline-phenobarbital-ephedrine combinations. **Iodide side-effects:** May cause nausea. Very long use may cause goiter. Discontinue if symptoms of iodism develop. **Iodide contraindications:** Tuberculosis; pregnancy (to protect the fetus against possible depression of thyroid activity). **MUDRANE-2 tablets** contain 195 mg. potassium iodide; 130 mg. aminophylline. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions** are those for aminophylline. **Iodide side-effects and contraindications are listed above. MUDRANE GG tablets** contain 100 mg. glyceryl guaiacolate; 130 mg. aminophylline; 21 mg. phenobarbital (Warning: may be habit-forming); 16 mg. ephedrine HCl. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions** are those for aminophylline-phenobarbital-ephedrine combinations. **MUDRANE GG-2 tablets** contain 100 mg. glyceryl guaiacolate; 130 mg. aminophylline. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions:** Those for aminophylline. **MUDRANE GG Elixir.** Each teaspoonful (5 cc) contains 26 mg. glyceryl guaiacolate; 20 mg. theophylline; 5.4 mg. phenobarbital (Warning: may be habit-forming); 4 mg. ephedrine HCl. **Dosage:** Children, 1 cc for each 10 lbs. of body weight; one teaspoonful (5 cc) for a 50 lb. child. Dose may be repeated 3 or 4 times a day. Adult, one tablespoonful, 4 times daily. All doses should be followed with ½ to full glass of water. **Precautions:** See those listed above for Mudrane GG tablets.

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Doctor Hayes responds to January MM article on state's medicaid program

To the Editor:

It was with a great deal of interest that I read, "Here is Definitive Summary of Current Status of Michigan Medicaid Program" in the January issue of *Michigan Medicine*.

We, at Michigan Blue Shield, were particularly pleased by Mr. Paterson's statement that "at no time was the ability or integrity of either individuals of Blue Cross and Blue Shield or the organization as a whole questioned in any way."

The article was concise and factual; however, it was not complete. Since MSMS felt that Mr. Paterson's remarks were important enough to be transmitted to all members, we feel that they would also be interested in further clarification of the Program from the Michigan Blue Shield point of view. Accordingly, we request that you publish this letter in your next issue of *Michigan Medicine*.

Following is some additional information and some points of clarification:

Program Cost

An omission in the article was the failure to identify a basic cause of the rapid rise in cost of the Medicaid Program in Michigan. We cannot speak to the issue of hospital and nursing home costs. However, in medical costs:

The increase was not due to the cost per service, the frequency of service per beneficiary or increased administrative cost; all these costs were low in comparison with other states and were declining during the period of Blue Shield's administration.

Costs did rise because of a significant increase in beneficiaries; from the onset of the Program to the end of 1971, the beneficiaries increased approximately 130%.

An additional cost factor was the expansion of payable benefits to chiropractic physicians.

Information Lack

From the onset of the Program, a monthly magnetic tape identifying all claims paid as well as providers and beneficiaries has been provided to the Department of Social Services. This would scarcely constitute a "lack of information."

(Continued on page 276)

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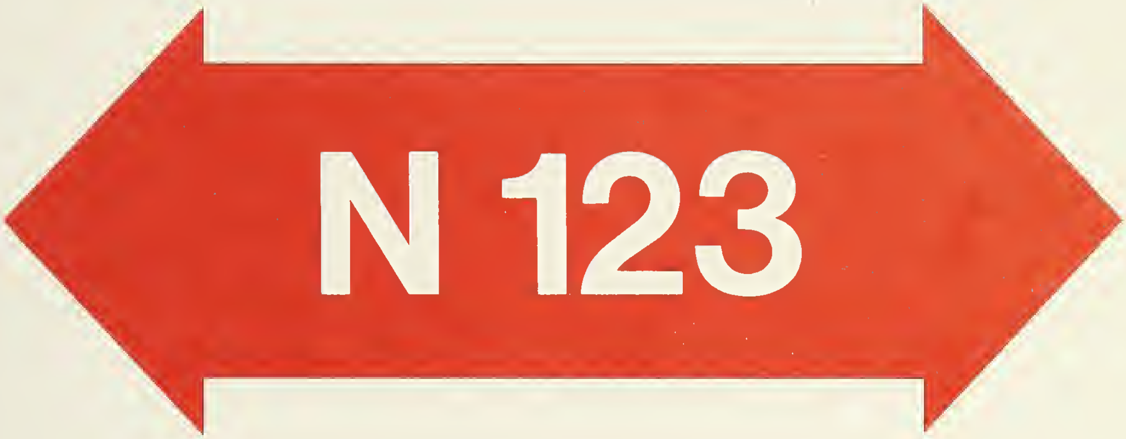

This symbol means both the patient and the doctor will always be treated right.

The double-pointed red arrow is the symbol for Blue Shield's new Reciprocity system. It's a national concept for paying claims for out-of-area subscribers. Usual, customary and reasonable payment will be made directly to you only by your local Blue Shield Plan no matter where the patient is from.

Reciprocity eliminates the need for billing subscribers or Blue Shield Plans from another area. No unfamiliar claims forms. No unnecessary wait for payment.

Recognize Blue Shield's Reciprocity symbol. It points the way to faster and more efficient payment, because now we make the payment first. The paperwork comes later, and we'll take care of that.

For complete details on just how Reciprocity works, contact your local Blue Shield Plan's Professional Relations Department.

Blue Shield®

The Provider Manual proposed by the Department of Social Services is not new; such a manual had been developed and distributed to physicians by Blue Shield.

The billing seminars proposed by the Department of Social Services have been an integral part of Blue Shield's service to physicians.

Start Up Cost

The initial $300,000 budget item for the Touche-Ross study does not represent the total start up cost for the Department of Social Services. There have been additional billings that have been contested.

The already incurred start up costs are greatly in excess of the Blue Shield start up cost, even inclusive of modifications and improvements made. In addition, Blue Shield was highly contributory to the Touche-Ross study.

Fiscal Agent Choice

It is not often that a carrier finds itself in the position of submitting a bid to an agency that is also a bidder for a role as a fiscal agent.

A May 1971 letter to Blue Shield clearly indicated that it would be the most likely carrier.

What better forum for your ideas is there than *Michigan Medicine,* which monthly reaches over 8,000 physicians? Instead of letting your flashes of insight, gripes and full-blown theories end with the hospital staff meeting or colleagues gathered over coffee, develop them, put them on paper and mail them to *Michigan Medicine*.

Maybe you can move mountains.

Official notification of the Department of Social Services intent was not received until approximately 10 days after the decision had been made and was public knowledge.

Savings

$150,000 is identified as a savings anticipated by elimination of a duplicate subscriber eligibility file. Had the Department of Social Services established a means of timely update direct to Blue Cross and Blue Shield, there would have been no need for a duplicate file.

$550,000 is identified as the anticipated savings because of improved provider enrollment and improved invoice processing. It is difficult to understand how the creation of a duplicate professional relations department for the Medicaid Program only would result in savings. In view of our low claims processing cost in comparison with other Plans administering Medicaid Programs, it is difficult to understand their anticipated savings in that activity.

Claims are made for an additional savings of $300,000 without identification of means; this represents a large "miscellaneous" item.

Elements of the New System

The 30-day payment to physicians promised by the Department of Social Services has already been accomplished by Blue Shield.

The cost of the 30-day payment time will be a 3% discount of physicians' bills.

The provider code identification on claims and payments had already been accomplished by Blue Shield.

Miscellaneous

We note there is no commitment to the fixed fee schedule preferred by MSMS.

We note there is a commitment to the AMA-CPT; what is not known is that the Department of Social Services is also studying other procedure coding systems.

A recent decision has been made to use the NABSP-71-coding and nomenclature.

Improvement in any activity is desirable and necessary. No group or company can survive without such improvement. If the decision by the State to act as its own fiscal agent in the Medicaid Program results in quality service to needy people at low cost, we at Michigan Blue Shield are heartily in favor of the decision and are doing everything we can to cooperate in a smooth transition. We wish them well.

Sincerely,
Louis F. Hayes, MD
Senior Vice President
Medical Affairs Division

Here's final word from critics of Halothane article

To The Editor:

We believe that some further comments are warranted in reply to Drs. McDonald and Climie's letter[1] of response to our criticism[2] of their paper[3].

Table 4 of the National Halothane Study[4] does indeed show an incidence of 1.02 per 10,000 Massive Hepatic Necrosis following Halothane anesthesia. It also shows an incidence of 1.7 per 10,000 following cyclopropane anesthesia, and an overall incidence of 0.96 per 10,000 following any anesthetic agent. But these are crude data. When corrected by the authors, 73 of the total 82 cases of Massive Hepatic Necrosis found, were attributed to causes other than anesthesia, leaving 9 to be accounted for. Of these 9, 7 had received Halothane, and 4 of the 7 had received it within 6 weeks of the final operative procedure. The total Halothane administrations screened was 254,989, so at worst the incidence was 1 per 35,000. This figure compares favorably with Slater et al's[5] 1 per 32,238 Hepatic dysfunction following general anesthesia.

Gall[6] does not imply that hepatic necrosis can be "attributed directly to the anesthetic agent"[1] indeed his thoughtful paper poses three questions in the summary which put such a conclusion in considerable doubt. Babior and Davidson[7] likewise state "through the preceding figures imply that Halothane may be a cause of Massive Hepatic Necrosis the method of case selection introduced a statistical bias of unknown size that could have favored this hypothesis. Thus the evidence for an etiological role of Halothane, although suggestive, is by no means conclusive."

The papers quoted, Herber and Specht[8], Keeri-Szanto and Lafleur[9], Gingrich and Virtue[10] and DeBacker and Longnecker[11] all preceed the National Halothane Study. It was in an attempt to answer the questions raised by these and many other authors about this time that the National Halothane Study was instigated.

The paper by Aach[12] is an example of the type of 'conclusion' we are concerned about. The patient in question had two bouts of quite prolonged hypotension, peritonitis, oliguria, atelectasis, congestive cardiac failure as well as cyclopropane anesthesia and yet Halothane is singled out as the culprit. This despite Babior and Davidson's[7] assertion that liver necrosis is most commonly associated with vascular insult. Peters et al[13] include patients who had not received Halothane in their series. Klatskin and Kimberg[14] paper concerning the anesthetist has been ably criticized by Simpson, Strunin and Walton[15] while both Dykes et al[16] and Burns[17] have reported the sequences Halothane — liver dysfunction — further Halothane — no damage.

We do not deny that "Halothane Hepatitis" is a possibility. Indeed the studies of Van Dyke and Chenoweth[18] and several subsequent reports[19,20,21,22,23] leave room for much speculation. However we do not accept it as a proven entity whilst the case is still subjudice. An excellent review of the present position is given in "Anesthesia and the Liver"[24] edited by Dykes, wherein hepatologists, internists, anesthesiologists, a pharmacologist and a lawyer all evaluate the data.

As stated in our letter[2] "we wish to be informed in the published literature of any toxic or other properties discovered" but we believe that pontifications such as "Two cases are described to illustrate the hepatotoxic potential of Halothane and Methoxyflurane.[3]" when this property is by no means proven, fail to clarify the true position. Categoric statements of this kind tend to encourage edicts in patients charts forbidding Halothane when it may be the drug of choice in prevailing circumstances; edicts which neither help the patient nor improve inter specialty relations.

Respectfully,
T. David Seigne, MD
Henry J. Zukowski, MD
A. Michael Prus, MD
Elmer J. Seim, MD
Peter A. DelGiudice, MD
Thomas S. Morley, MD
Anesthesia Services, P.C.
4160 John R Street
Detroit 48201

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Carolina doctor seeks contributions to his book

To the Editor:

I am editing a book on the role of faith or religion in healing from a physician's standpoint. Any physician interested in contributing to this book, please write to the following address:

Claude A. Frazier, MD
4-C Doctors Park
Ashville, N. C. 28801

Sincerely,
Claude A. Frazier, MD

How about Michigan artwork on MM cover?

To the Editor:

I was reviewing the most recent issue of *Michigan Medicine* when the thought occurred to me that we could do something to deter the emigration of medical graduates from the State of Michigan through *Michigan Medicine.*

Couldn't you run a feature cover story several times a year using either a color photo or a black and white scene that might be either typical or unique in Michigan? The potential is endless; college campus scenes, skiing, iron or copper mines, Greenfield Village, salt mines, etc.

Michigan Medicine can be found in hospital libraries, interns' quarters, doctors' offices, etc. Who knows, this could attract some doctor to Michigan who might otherwise go to Florida or California.

May I commend you on the fine publication.

Sincerely,
W. S. Jones, Jr., MD

Ed. Note: Current plans are for the May issue of *Michigan Medicine* to feature a Michigan cover.

Doctor Moench has praise for Michigan Medicine

To the Editor:

I wish to express my appreciation for the privilege of receiving this excellent publication, *Michigan Medicine,* especially for the medical profession.

I appraise *Michigan Medicine* as one of the most successful examples of teamwork on the part of the Publication Committee, the editorial staff and all concerned with serving the profession with up-to-date, concise, time-saving information and facts in these swiftly-changing times.

I wish all of you continued success in your effort. Keep up the good work.

Sincerely,
G. Frederick Moench, MD
147 Center St.
Sanford, Mich. 48657

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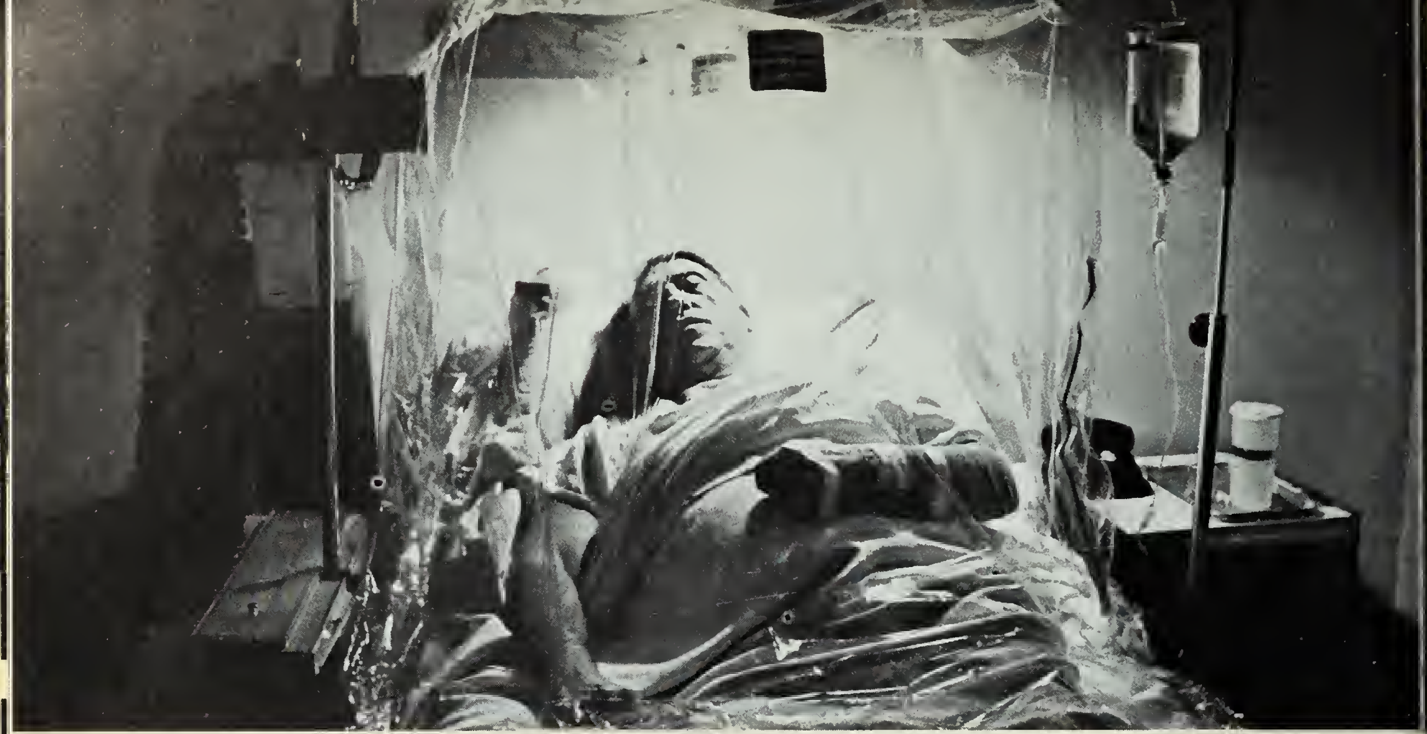
It is significant in this era of increased regulation, that Empirin Compound with Codeine has been placed in a less restrictive category. You may now wish to consider Empirin with Codeine even more frequently for its predictable analgesia in acute or protracted pain of moderate to severe intensity.

Empirin Compound with Codeine No. 3 contains codeine phosphate* (32.4 mg.) gr. ½. No. 4 contains codeine phosphate* (64.8 mg.) gr. 1. *(Warning—may be habit-forming.) Each tablet also contains: aspirin gr. 3½, phenacetin gr. 2½, caffeine gr. ½.



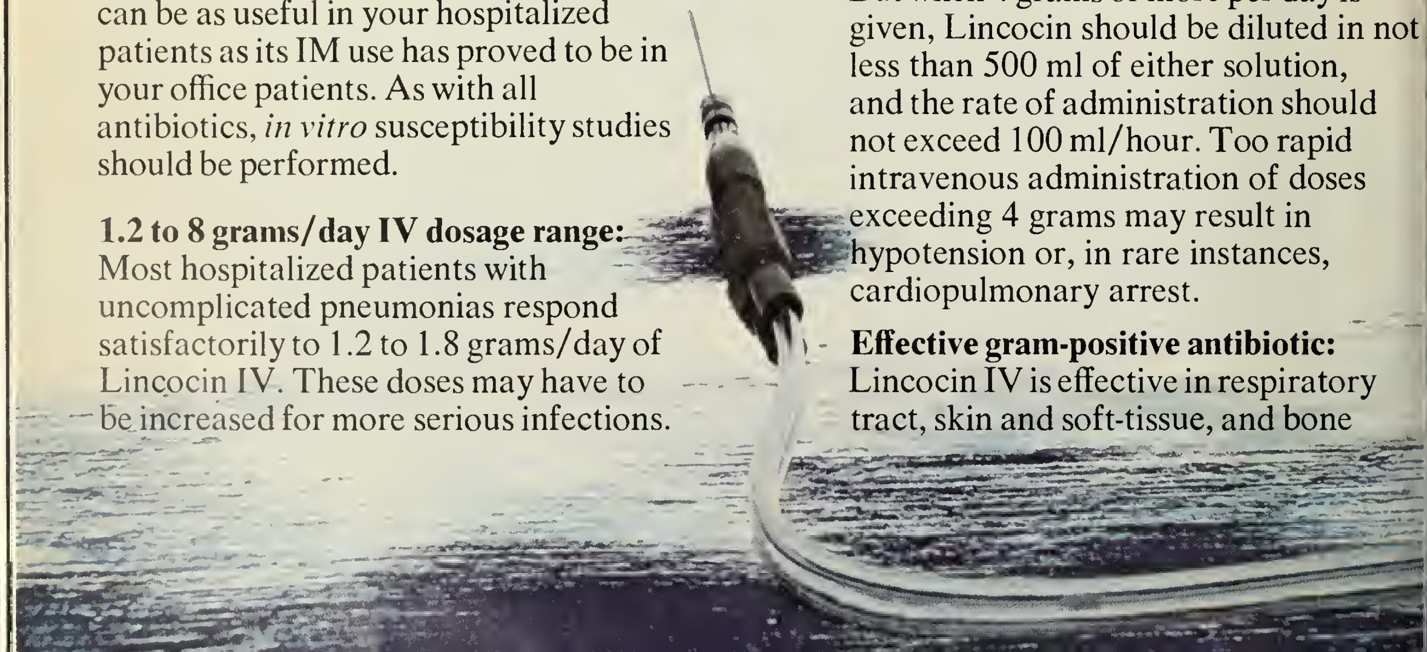
When you select this familiar antibiotic for IV infusion you have available a broad dosage range that hospitalized patients may need.

Intravenous Lincocin (lincomycin hydrochloride, Upjohn), with its 1.2 to 8 grams/day dosage range, covers many serious and even life-threatening infections. Lincocin is effective in infections due to susceptible strains of streptococci, pneumococci, and staphylococci. Lincocin IV therefore can be as useful in your hospitalized patients as its IM use has proved to be in your office patients. As with all antibiotics, *in vitro* susceptibility studies should be performed.

1.2 to 8 grams/day IV dosage range: Most hospitalized patients with uncomplicated pneumonias respond satisfactorily to 1.2 to 1.8 grams/day of Lincocin IV. These doses may have to be increased for more serious infections. In life-threatening situations as much as 8 grams/day has been administered intravenously to adults.

In usual IV doses, Lincocin (lincomycin hydrochloride, Upjohn) should be diluted in 250 ml or more of normal saline solution or 5% glucose in water. But when 4 grams or more per day is given, Lincocin should be diluted in not less than 500 ml of either solution, and the rate of administration should not exceed 100 ml/hour. Too rapid intravenous administration of doses exceeding 4 grams may result in hypotension or, in rare instances, cardiopulmonary arrest.

Effective gram-positive antibiotic: Lincocin IV is effective in respiratory tract, skin and soft-tissue, and bone



nfections caused by susceptible strains f pneumococci, streptococci, and taphylococci, including penicillin-esistant strains. Staphylococcal strains esistant to Lincocin (lincomycin ydrochloride, Upjohn) have been ecovered. Before initiating therapy, ulture and susceptibility studies should e performed. Lincocin has proved aluable in treating patients hyper-ensitive to penicillin or cephalosporins, ince Lincocin does not share ntigenicity with these compounds. owever, hypersensitivity reactions ave been reported, some of these in atients known to be sensitive to enicillin.

ell tolerated at infusion site: Lincocin ntravenous infusions have not roduced local irritation or phlebitis, hen given as recommended. Lincocin usually well tolerated in patients who re hypersensitive to other drugs. evertheless, Lincocin should be used autiously in patients with asthma or ignificant allergies.

 patients with impaired renal function, he recommended dose of Lincocin hould be reduced to 25–30% of he dose for patients with normal idney function. Its safety in regnant patients and in infants ss than one month of age has ot been established.

incocin may be used with other ntimicrobial agents: Since Lincocin stable over a wide pH range, it is uitable for incorporation in ntravenous infusions; it also may be administered concomitantly with other antimicrobial agents when indicated. However, Lincocin should not be used with erythromycin, as *in vitro* antagonism has been reported.

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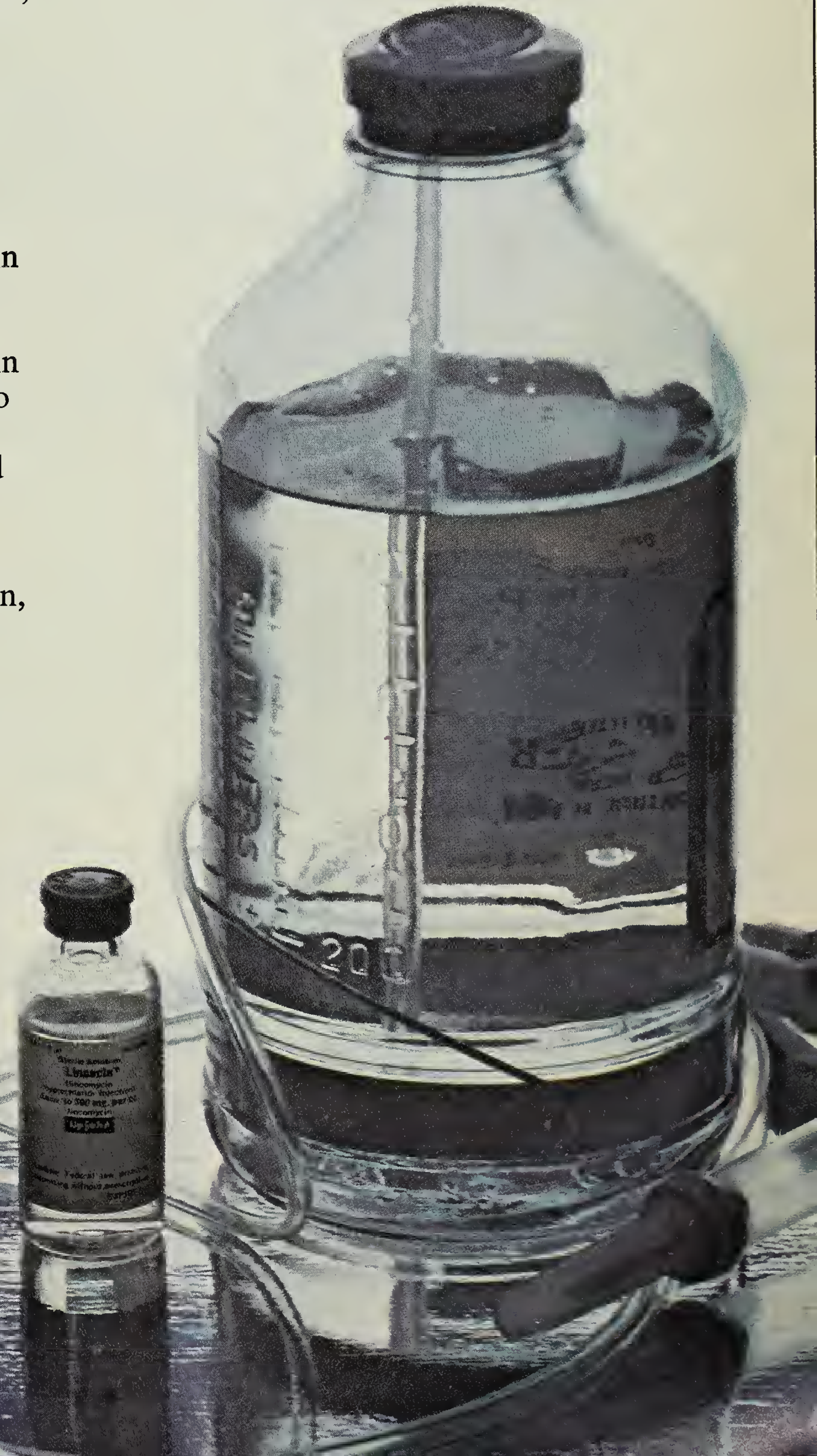

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(lincomycin hydrochloride, Upjohn)

Up to 8 grams per day by IV infusion for hospitalized patients with life-threatening infections. Lincocin is effective in infections due to susceptible strains of streptococci, pneumococci, and staphylococci. As with all antibiotics, *in vitro* susceptibility studies should be performed.

Each preparation contains:	Lincomycin hydrochloride monohydrate equivalent to lincomycin base
250 mg Pediatric Capsule	250 mg
500 mg Capsule	500 mg
*Sterile Solution per 1 ml	300 mg
Syrup per 5 ml	250 mg

*Contains also: Benzyl Alcohol 9 mg; and, Water for Injection—q.s.

Lincocin (lincomycin hydrochloride) is indicated in infections due to susceptible strains of staphylococci, pneumococci, and streptococci. *In vitro* susceptibility studies should be performed. Cross resistance has not been demonstrated with penicillin, ampicillin, cephalosporins, chloramphenicol or the tetracyclines. Some cross resistance with erythromycin has been reported. Studies indicate that Lincocin does not share antigenicity with penicillin compounds.

CONTRAINDICATIONS: History of prior hypersensitivity to lincomycin or clindamycin. Not indicated in the treatment of viral or minor bacterial infections.

WARNINGS: *CASES OF SEVERE AND PERSISTENT DIARRHEA HAVE BEEN REPORTED AND HAVE AT TIMES NECESSITATED DISCONTINUANCE OF THE DRUG. THIS DIARRHEA HAS BEEN OCCASIONALLY ASSOCIATED WITH BLOOD AND MUCUS IN THE STOOLS AND HAS AT TIMES RESULTED IN AN ACUTE COLITIS. THIS SIDE EFFECT USUALLY HAS BEEN ASSOCIATED WITH THE ORAL DOSAGE FORM BUT OCCASIONALLY HAS BEEN REPORTED FOLLOWING PARENTERAL THERAPY.* A careful inquiry should be made concerning previous sensitivities to drugs or other allergens. Safety for use in pregnancy has not been established and Lincocin (lincomycin hydrochloride) is not indicated in the newborn. Reduce dose 25 to 30% in patients with severe impairment of renal function.

PRECAUTIONS: Like any drug, Lincocin should be used with caution in patients having a history of asthma or significant allergies. Overgrowth of nonsusceptible organisms, particularly yeasts, may occur and require appropriate measures. Patients with pre-existing monilial infections requiring Lincocin therapy should be given concomitant antimonilial treatment. During prolonged Lincocin therapy, periodic liver function studies and blood counts should be performed. Not recommended (inadequate data) in patients with pre-existing liver disease unless special clinical circumstances indicate. Continue treatment of β-hemolytic streptococci infections for 10 days to diminish likelihood of rheumatic fever or glomerulonephritis.

ADVERSE REACTIONS: *Gastrointestinal*—Glossitis, stomatitis, nausea, vomiting. Persistent diarrhea, enterocolitis, and pruritus ani. *Hemopoietic*—Neutropenia, leukopenia, agranulocytosis, and thrombocytopenic purpura have been reported. *Hypersensitivity reactions*—Hypersensitivity reactions such as angioneurotic edema, serum sickness, and anaphylaxis have been reported, sometimes in patients sensitive to penicillin. If allergic reaction occurs, discontinue drug. Have epinephrine, corticosteroids, and antihista-
mines available for emergency treatmen
Skin and mucous membranes—Skin rash
urticaria, vaginitis, and rare instances of e
foliative and vesiculobullous dermatitis ha
been reported. *Liver*—Although no direct
lationship to liver dysfunction is establish
jaundice and abnormal liver function te
(particularly serum transaminase) have be
observed in a few instances. *Cardiovascul*
—Instances of hypotension following pare
teral administration have been reporte
particularly after too rapid IV administr
tion. Rare instances of cardiopulmonary a
rest have been reported after too rapid
administration. If 4.0 grams or more admi
istered IV, dilute in 500 ml of fluid a
administer no faster than 100 ml per hou
Special senses—Tinnitus and vertigo ha
been reported occasionally. *Local reactio*
—Excellent local tolerance demonstrated
intramuscularly administered Lincoc
(lincomycin hydrochloride). Reports of pa
following injection have been infreque
Intravenous administration of Lincocin
250 to 500 ml of 5% glucose in distill
water or normal saline has produced
local irritation or phlebitis.

HOW SUPPLIED: *250 mg* and *500 m*
Capsules—bottles of 24 and 100. *Steri*
Solution, 300 mg per ml—2 and 10 ml via
and 2 ml syringe. *Syrup, 250 mg per 5*
—60 ml and pint bottles.

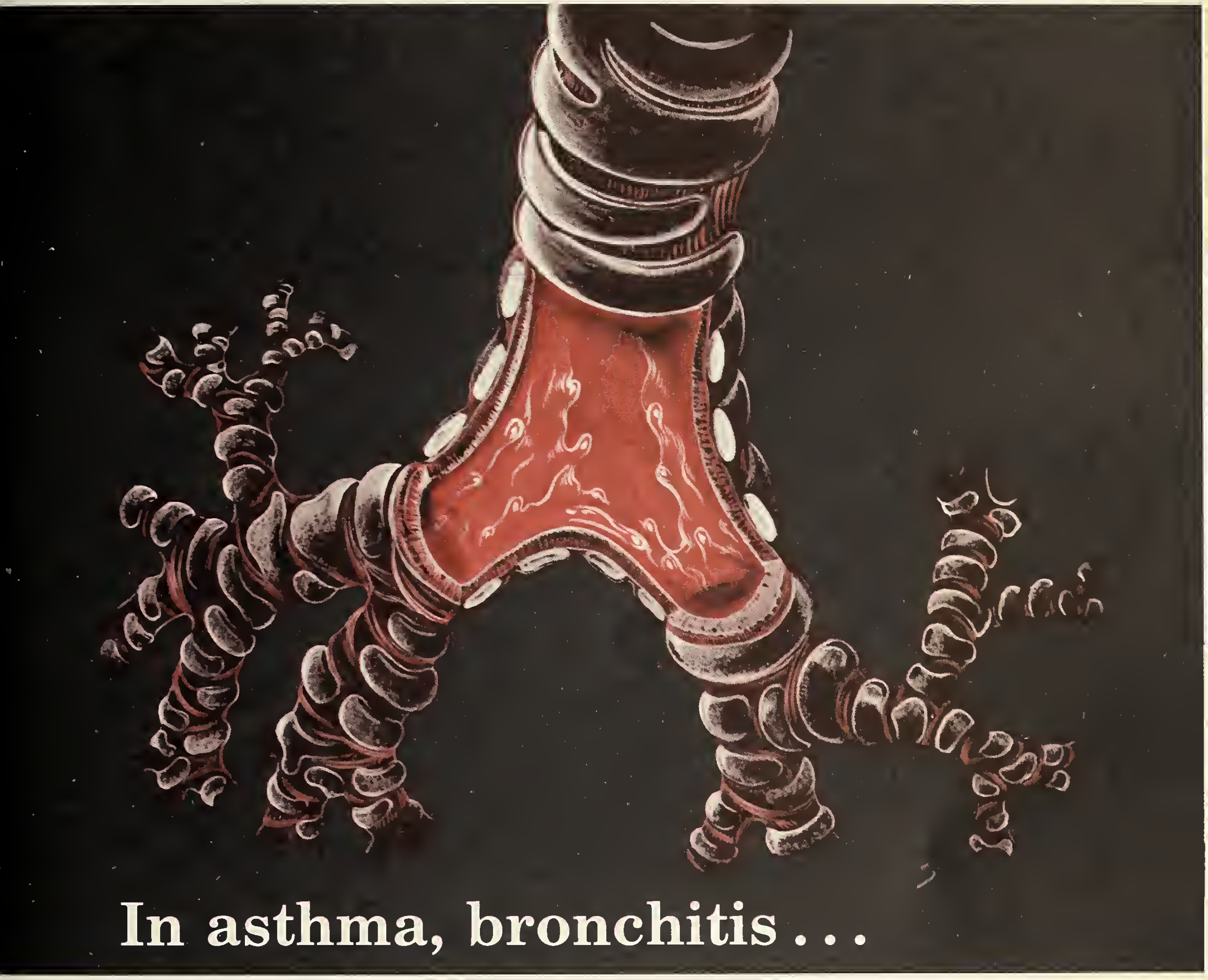
For additional product information, consu
the package insert or see your Upjoh
representative.

MED B-6-S (KZL-7) JA71-163

The Upjohn Company
Kalamazoo, Michigan 49001

Upjoh

MOVE-OUT STICKY MUCUS...



"Many physicians use iodides intravenously when they suspect that the main reason for airway obstruction is sticky mucus but oral iodides are more likely to exert an expectorant action."[1]

"For the viscid sputum, potassium iodide (. . . preferable as enteric coated tablets) may be best."[2]

Provide tastefree, well-tolerated KI in convenient SLOSOL coated tablets—

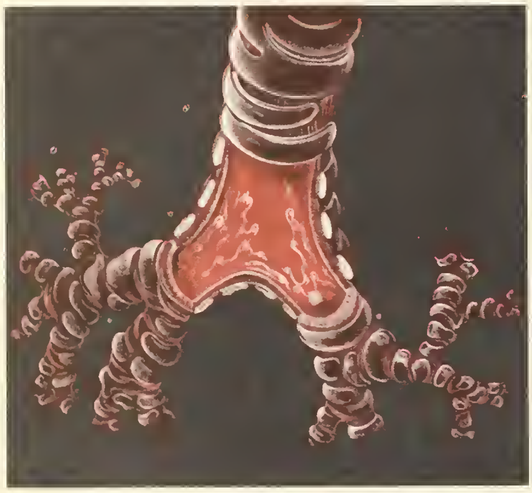
IODO-NIACIN®

Each SLOSOL coated tablet contains potassium iodide 135 mg. and niacinamide hydroiodide 25 mg.

COLE

please see next page for prescribing information—

Promote Productive Cough–



"The productive cough serves the necessary purpose of removing excess mucus from the bronchial tree."[3]

". . . there is clear evidence that the loosening of the bronchial mucus blanket must begin from within the underlying mucus glands where it is anchored and not from the surface. Complications of iodides are too occasional to avoid the use of this valuable medication."[3]

Rx Information:

INDICATIONS: The primary indication for Iodo-Niacin is in any clinical condition where iodide therapy is desired. All of the usual indications for the iodides apply to Iodo-Niacin and include:

RESPIRATORY DISEASE: The use of Iodo-Niacin is indicated whenever an expectorant action is desired to increase the flow of bronchial secretion and thin out tenacious mucus as seen in bronchial asthma, and other chronic pulmonary disease. Iodo-Niacin has also proven of value in sinusitis, bronchitis, bronchiectasis, and other chronic and acute respiratory diseases where the expectorant action of iodide is desired.

THYROID DISEASE: Iodo-Niacin is indicated in any thyroid disorder due to iodine deficiency, such as endemic goiter or hypoplastic goiter, and where hypothyroidism is secondary to iodine deficiency. Iodo-Niacin will suppress mild hyperthyroidism completely, and partially suppress more severe hyperthyroid states. Iodo-Niacin is also of value in suppressing the symptoms of hyperthyroidism and decreasing the size and vascularity of the thyroid gland prior to thyroidectomy.

ARTERIOSCLEROSIS: Iodides have been reported as relieving some of the symptoms associated with arteriosclerosis. The mechanism of action is unknown, but the effects are documented.

OPHTHALMOLOGY: Iodo-Niacin has been reported to be of value in retinal and vitreous hemorrhages. The mechanism of action is unknown, but absorption of the hemorrhagic areas has been observed following use of this drug. It is also reported to be of value in reducing or removing vitreous floaters.

SIDE EFFECTS: Serious adverse side effects from the use of Iodo-Niacin are rare. Mild symptoms of iodism such as metallic taste, skin rash, mucous membrane ulceration, salivary gland swelling, and gastric distress have occurred occasionally. These generally subside promptly when the drug is discontinued. Pulmonary tuberculosis is considered a contraindication to the use of iodides by some authorities, and the drug should be used with caution in such cases. Rare cases of goiter with hypothyroidism have been reported in adults who had taken iodides over a prolonged period of time, and in newborn infants whose mothers had taken iodides for prolonged periods. The signs and symptoms regressed spontaneously after iodides were discontinued. The causal relationship and exact mechanism of action of iodides in this phenomenon are unknown. Appropriate precautions should be followed in pregnancy and in individuals receiving Iodo-Niacin for prolonged periods.

DOSAGE: The oral dose for adults is two tablets after meals taken with a glass of water. For children over eight years, one tablet after meals with water. The dosage should be individualized according to the needs of the patient on long-term therapy.

HOW SUPPLIED: Cole's Iodo-Niacin tablets are available in bottles of 100, 500 and 1,000. Slosol coated pink. NDC 55-6458.

IODO-NIACIN®

Each SLOSOL tablet contains potassium iodide 135 mg. and niacinamide hydroiodide 25 mg. Sig. *ĳ* tabs. t.i.d. p.c.

COLE
PHARMACAL CO. INC.
St. Louis, Mo. 63108

References: 1. Itkin, I. H., Am. Fam. Phys. 4:83, 1971. 2. Feinberg, S. M., Consultant Sept., 1971, pg. 32. 3. Bookman, R., Ann. Allerg. 29:367, 1971.

when an unnerving experience compounds the pain

the compound analgesic that calms instead of caffeinates

In addition to pain, this patient has experienced anxiety, fear, embarrassment, anger, and frustration. It's very likely that these psychic factors actually accentuated his perception of pain. Surely the last thing he needs is an analgesic containing caffeine. A much more logical choice is Phenaphen with Codeine. It provides a quarter grain of phenobarbital to take the nervous "edge" off, so the rest of the formula can control the pain more effectively. It's no accident that the Phenaphen formulations contain a sedative rather than a stimulant. Don't you agree, Doctor, that psychic overlay is an important factor in most of the accident cases you see?

A. H. Robins Company, Richmond, Va. **A·H·ROBINS**

Phenaphen® with Codeine

Phenaphen with Codeine Nos. 2, 3, or 4 contains: Phenobarbital (¼ gr.), 16.2 mg. (warning: may be habit forming); Aspirin (2½ gr.), 162.0 mg.; Phenacetin (3 gr.), 194.0 mg.; Hyoscyamine sulfate, 0.031 mg.; Codeine phosphate, ¼ gr. (No. 2), ½ gr. (No. 3) or 1 gr. (No. 4) (warning: may be habit forming).

Indications: Provides relief in severer grades of pain, on low codeine dosage, with minimal possibility of side effects. Its use frequently makes unnecessary the use of addicting narcotics. *Contraindications:* Hypersensitivity to any of the components. *Precautions:* As with all phenacetin-containing products, excessive or prolonged use should be avoided. *Side effects:* Side effects are uncommon, although nausea, constipation and drowsiness may occur. *Dosage:* Phenaphen No. 2 and No. 3—1 or 2 capsules every 3 to 4 hours as needed; Phenaphen No. 4—1 capsule every 3 to 4 hours as needed. For further details see product literature.

CIII Phenaphen with Codeine is now classified in Schedule III, Controlled Substances Act of 1970. Available on prescription and may be refilled 5 times within 6 months, unless restricted by state law.

Snifter working again

For upper respiratory allergies and infections including the common cold, Dimetapp Extentabs® effectively relieve the stuffiness, drip and congestion all night and all day long on just one Extentab every 12 hours. For most patients drowsiness or overstimulation is unlikely.

prescribing information appears on next page

A·H·ROBINS

A. H. Robins Company
Richmond, Va. 23220

Dimetapp Extentabs®

Dimetane® (brompheniramine maleate), 12 mg., phenylephrine HCl, 15 mg., phenylpropanolamine HCl, 15 mg.

Dimetapp Extentabs®

INDICATIONS: Dimetapp Extentabs are indicated for symptomatic relief of allergic manifestations of upper respiratory illnesses, such as the common cold, seasonal allergies, sinusitis, rhinitis, conjunctivitis and otitis. In these cases it quickly reduces inflammatory edema, nasal congestion and excessive upper respiratory secretions, thereby affording relief from nasal stuffiness and postnasal drip.
CONTRAINDICATIONS: Hypersensitivity to antihistamines of the same chemical class. Dimetapp Extentabs are contraindicated during pregnancy and in children under 12 years of age. Because of its drying and thickening effect on the lower respiratory secretions, Dimetapp is not recommended in the treatment of bronchial asthma. Also, Dimetapp Extentabs are contraindicated in concurrent MAO inhibitor therapy.
WARNINGS: *Use in children:* In infants and children particularly, antihistamines in overdosage may produce convulsions and death.
PRECAUTIONS: Administer with care to patients with cardiac or peripheral vascular diseases or hypertension. Until the patient's response has been determined, he should be cautioned against engaging in operations requiring alertness such as driving an automobile, operating machinery, etc. Patients receiving antihistamines should be warned against possible additive effects with CNS depressants such as alcohol, hypnotics, sedatives, tranquilizers, etc.
ADVERSE REACTIONS: Adverse reactions to Dimetapp Extentabs may include hypersensitivity reactions such as rash, urticaria, leukopenia, agranulocytosis and thrombocytopenia; drowsiness, lassitude, giddiness, dryness of the mucous membranes, tightness of the chest, thickening of bronchial secretions, urinary frequency and dysuria, palpitation, hypotension/hypertension, headache, faintness, dizziness, tinnitus, incoordination, visual disturbances, mydriasis, CNS-depressant and (less often) stimulant effect, anorexia, nausea, vomiting, diarrhea, constipation, and epigastric distress.
HOW SUPPLIED: Light blue Extentabs in bottles of 100 and 500.

In memoriam

Martin S. Dubpernell, MD
Detroit

Martin Samuel Dubpernell, MD, Detroit physician for 55 years, died Jan. 24 at the age of 86.

Doctor Dubpernell was a graduate of the University of Louisville school of medicine and was a former member of the Grace Hospital medical staff.

Raul E. Flores, MD
Marquette

Raul E. Flores, MD, Marquette State Prison physician for eight years, died Jan. 17 at the age of 51.

A native of Cuba, Doctor Flores came to the U.S. in 1957. He formerly was a health officer with the Hinds County Health Department in Jackson, Miss. A graduate of the Havana University School of Medicine, Doctor Flores practiced general medicine in Cuba until 1957. He was a member of the Wisconsin and Mississippi medical societies, as well as MSMS.

Raymond B. Glemet, MD
Detroit

Raymond Bernard Glemet, MD, Detroit physician for more than 50 years, died Jan. 25 at the age of 87.

Doctor Glemet was born in France but lived in Detroit 78 years. He was a graduate of the Detroit College of Medicine. He was affiliated with Providence, St. Mary's, Grace and Lincoln hospitals but was retired in 1963.

Ray E. Goldner, MD
Lansing

Roy Edwin Goldner, MD, Lansing generalist nearly 50 years, died Jan. 8 at the age of 72.

Doctor Goldner was a graduate of the Indiana University School of Medicine and was affiliated with St. Lawrence and Sparrow hospitals in Lansing. He was past secretary of the Ingham County Medical Society.

Winfred B. Harm, MD
Detroit

Winfred B. Harm, MD, a 50-year member of MSMS and long-time Detroit physician, died Jan. 15 at the age of 78.

A graduate of the Detroit College of Medicine, Doctor Harm was a generalist. He was past secretary of the American Academy of General Practitioners, past president of the Wayne County Medical Society, former director of the Michigan Medical Service and former chief of staff of Providence Hospital, Southfield.

Doctor Harm's long and dedicated service had also included service as an MSMS councillor and editor of the *Detroit Medical News.*

Kenneth Conklin Miller, MD
Saugatuck

Kenneth Conklin Miller, MD, Saugatuck physician for 26 years and past president of the Allegan County Medical Society, died Jan. 14 at the age of 55.

He was a graduate of Wayne State University School of Medicine. He was affiliated with Holland City and Douglas Community hospitals.

Dayton H. O'Donnell, MD
Bloomfield Township

Dayton H. O'Donnell, MD, a member of the staff of Southfield's Providence Hospital, died Feb. 6 at the age of 69.

Doctor O'Donnell was a graduate of St. Louis University school of medicine and was a surgeon. He was a member of the American and International Colleges of Surgeons and was the son of the late David O'Donnell, MD, one of the Providence Hospital founders.

Leo W. Slazinski, MD
Trenton

Detroit-area physician for nearly 50 years, Leo W. Slazinski, MD, Trenton, died Jan. 21 at the age of 77.

Doctor Slazinski was a life member of MSMS and also belonged to the American Academy of Family Physicians. He had been head of the general practice department at Mt. Carmel Mercy Hospital since 1942 and had been on the staff of St. Joseph Mercy Hospital, Detroit, since 1926.

Anthony F. Stiller, MD
Kalamazoo

Anthony Francis Stiller, MD, Kalamazoo, former medical superintendent at the Southwestern Michigan Tuberculosis Sanatorium, died Dec. 22 at the age of 63.

Doctor Stiller had been instrumental in the establishment of the sanatorium. He also was affiliated with the Bronson Methodist Hospital in Kalamazoo.

A generalist, Doctor Stiller was a graduate of Georgetown University medical school. He was a former member of the MSMS TB Control Committee and belonged to the National Tuberculosis Association, the National and Michigan Trudeau Societies.

Wilbur D. Towsley, MD
Midland

Long-time Midland family physician, Wilbur D. Towsley, MD, died Dec. 20 at the age of 74. He was the brother of Harry A. Towsley, MD, recently-retired chairman of the U-M Department of Postgraduate Medical Education and chairman of the MSMS Committee of Postgraduate Education.

Doctor Towsley had practiced in Midland for 48 years and in 1968 he received the MSMS Certificate of Commendation. He was a past president of the Midland County Medical Association.

In 1962, the Midland Exchange Club awarded Doctor Towsley its first "Book of Golden Deeds," citing him for having delivered more than 6,000 babies in the county and for helping children and families in financial need.

Doctor Towsley served on the State Boxing Commission in 1939 and was on the first board of directors of the Midland Hospital Association. He also served on the Midland City Charter Commission.

Doctor Towsley was a graduate of the University of Michigan Medical School.

Otto Von Renner, MD
Vassar

Otto Von Renner, MD, Vassar, one of Michigan's oldest practicing physicians at the time of his retirement five years ago, died Dec. 23 at the age of 98.

Doctor Von Renner, a general practitioner, had practiced in Vassar since 1924. He was a former teacher and a veteran of the Spanish-American War. He was affiliated with St. Luke's Hospital in Saginaw.

Doctor Von Renner was a graduate of the University of Buffalo school of medicine and had the reputation of attending more medical society meetings than anyone in his local society. In his late eighties, he drove to San Francisco to attend the AMA convention.

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Socio·economic

Many materials at state library for blind, handicapped

Michigan physicians who treat the blind or others unable to read ordinary printed materials because of handicaps should be aware of the wealth of materials available for the handicapped through the State Library in Lansing.

The library now has more than 92,000 books in braille or large print and recorded on "talking book" and magnetic tapes. In addition, the library circulates nearly 90 magazines in braille or large print and recorded.

Individuals in institutions, as well as those who are independent, are eligible for the library's services, all of them free. Each month, the Lansing facility circulates 23,000 books and magazines to approximately 8,000 readers.

The library also loans more than 4,300 "talking book" machines (record players), specially designed for use by the blind and physically handicapped.

Another important service of the library is to help blind and physically handicapped students locate textbooks, which it will have recorded by volunteers if not already in a form the student can use.

Braille materials are loaned to all eligible residents in Michigan. Large print and talking books recorded on disc and tape, plus talking book machines are loaned by the Blind and Physically Handicapped Library to eligible residents of Michigan except those in Wayne County.

Those interested may contact the Michigan Department of Education, State Library Services, Blind and Physically Hadicapped Library, 735 E. Michigan Ave., Lansing, 48913, or call (517) 353-1590.

Wayne residents may obtain all materials except those in Braille from the Wayne County Public Library, Blind and Physically Handicapped Department, 33030 Van Born Road, Wayne, 48184, or telephone (313) 722-3000.

The handicapped person is required to apply for the services with a certified statement of eligibility.

Phase II price controls to lower Medicare payments

The Detroit NEWS published a recent assessment of the effect of President Nixon's price controls on physicians treating Medicare patients. Following is the bulk of the article:

Doctors treating Medicare patients after July 1 will be reimbursed about $38 million less than would have been the case if President Nixon's price controls had not been in effect.

Doctors who treat the nation's 19.8 million Medicare patients are paid from a fund to which both the patients and the government contribute $5.60 a month.

That payment will rise to $5.80 a month on July 1.

The fees which the government allows doctors to collect for treating Medicare patients are based on community standards, and during 1971 those fees rose by 6.2 percent.

The 1971 fee schedules are important because they are the base period which the government used to decide what doctors can collect from Medicare during the 12 months beginning July 1.

But instead of allowing the 6.2 percent increase which actually took place during the base period, the Price Commission—in a little publicized ruling on Dec. 30—decided to impose a 2.5 percent ceiling on the 1971 increase.

Here's ratio of physicians / patients in 10 biggest states

Since 1960, the population of the United States has increased 12%, while the number of physicians has increased by 28%, according to statistics released by the MSMS Bureau of Economic Information.

A breakdown of the 10 most populous states, with numbers of patient care physicians and the numbers of persons per patient care physician, follows below:

State	Population[1]	Patient Care Physicians[2]	Population Per Patient Care Physician
California	19,981,000	31,930	628
New York	18,457,000	36,000	513
Pennsylvania	11,835,000	15,170	780
Texas	11,258,000	11,380	989
Illinois	11,084,000	13,180	841
Ohio	10,796,000	12,330	876
Michigan	8,759,000	9,520	920
New Jersey	7,251,000	8,960	809
Florida	6,473,000	7,840	826
Massachusetts	5,519,000	9,350	590

[1] *As of December 31, 1969*

[2] *As of December 31, 1970 (includes hospital based physicians)*

Martha Griffiths pushes health care bill at allergists' meeting

"Dramatic changes are coming in health care in this country . . . they are coming within the next two or three years . . . the time is now for you, the doctors, to speak up or hold your peace hereafter," according to Congresswoman Martha W. Griffiths, 17th District, Detroit.

Speaking at the Jan. 12 meeting of the Michigan Allergy Society in Detroit's Mercy College Student Union Building, Mrs. Griffiths alleged that "The system we now have is unfair, unfair to the very people who are paying the bills, and an answer—right or wrong—will be found. The problem is too pressing."

The answer, she believes, is her health care bill, which she terms a "total bill." It also is known as The Kennedy Plan or The Health Security Act, and is sponsored by Senator Edward Kennedy as well as Congresswoman Griffiths.

Her bill seeks to establish cradle-to-grave nationalized insurance coverage for every U.S. resident. It would be administered by the Social Security Administration, and would replace current government plans. It provides for doctor bills, some dental services, institutional care and other professional and supporting services. Money for the plan would come from a one per cent tax on each citizen's first $15,000 of income, three per cent from employers, with the government providing the remainder. Estimated cost would be $70 billion annually, which Mrs. Griffiths says is about what is being paid now.

She reported that one of the most consistent pushers is chiropractic. The cult's efforts are receiving some backing—in one case as many as 50,000 letters over a short period of time—partly because in many rural areas chiropractors are much more readily available than medical doctors, she said.

Mrs. Griffiths stated that under her bill the government would not own hospitals, would not set fees, and would not make determinations on what amount of money any doctor would receive. The money would be allocated on a regional, past performance basis, i.e., the amount that had been spent earlier in the region for health care.

"Doctors themselves would control the method of money dispersal; they would determine whether it would be paid on fee for service or salary plan. There would be a peer review which would be truly meaningful, because when doctors look at the records they would be more able than anyone else to make a telling decision as to whether a particular doctor deserved a certain amount of money, or whether someone else deserved it."

Her bill, which she said is not compulsory for doctors, would "permit all kinds of diversity in the way medical tasks are performed. You could have doctors practicing singly, or in groups, but it would reward group practice" . . . with payments as outlined above.

Mrs. Griffiths also feels there are too few medical schools in this country, and that it is unconscionable to have a situation where an entire graduating class of a foreign medical school charters a plane and comes to this country to practice.

In her closing remarks to the Michigan Allergy Society, Mrs. Griffiths repeated that a national health plan will become law. She asked that doctors assist in developing the best, fairest, and most workable plan possible.

"The time is now for the people with the most expertise to speak up. You doctors should make your opinions heard now!" (C.R.S.)

Smallpox vaccinations law now: but new bills pushing change

Two bills written by the Michigan Department of Public Health to change the requirements for smallpox vaccinations and TB skin tests are before the Michigan legislature.

Rep. Joseph Snyder (D-St. Clair Shores) introduced the bills on Feb. 9. The first would amend Sec. 376 of the School Code so that the smallpox immunization and TB skin test would not be required for children entering school, and the other would give authority to the MDPH director to say what examination and immunization requirements are necessary for entering school children. Under the present law, it takes an act of the legislature to add or delete health requirements from the code.

John L. Isbister, MD, chief, Community Health Bureau, MDPH, expresses hope that the two bills will be passed in the current legislative session.

They are the result of a U.S. Public Health Service recommendation made in October that routine smallpox vaccinations be discontinued in this country.

The recommendation was backed by the American Academy of Pediatrics Committee on Infectious Diseases, with the idea that the risk is now insufficient to justify the routine primary vaccination of infants and children.

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A FULL TIME CYTOTECHNOLOGIST needed immediately ASCP or eligible. Modern, expanding clinical laboratory, 460 bed general hospital. Excellent salary, paid vacations, insurance and holidays. Write or call collect, Personnel Department, Mr. Thornton, Edward W. Sparrow Hospital, 1215 E. Michigan Avenue, Lansing, Michigan 48912.

PHYSICIANS WANTED: Orthopedic Surgeon, Urologist. Internist and General Practitioners to establish independent practices in upper midwest ski mecca, famous summer resort community. Local college and growing, year-around population of 40,000. New acute care, general hospital will provide moving stipend and one year's free rent on adjacent luxurious office suites. Milton D. Rasmussen, Administrator Lockwood-MacDonald Hospital, Petoskey, Michigan 49770, Phone: (616) 347-3985.

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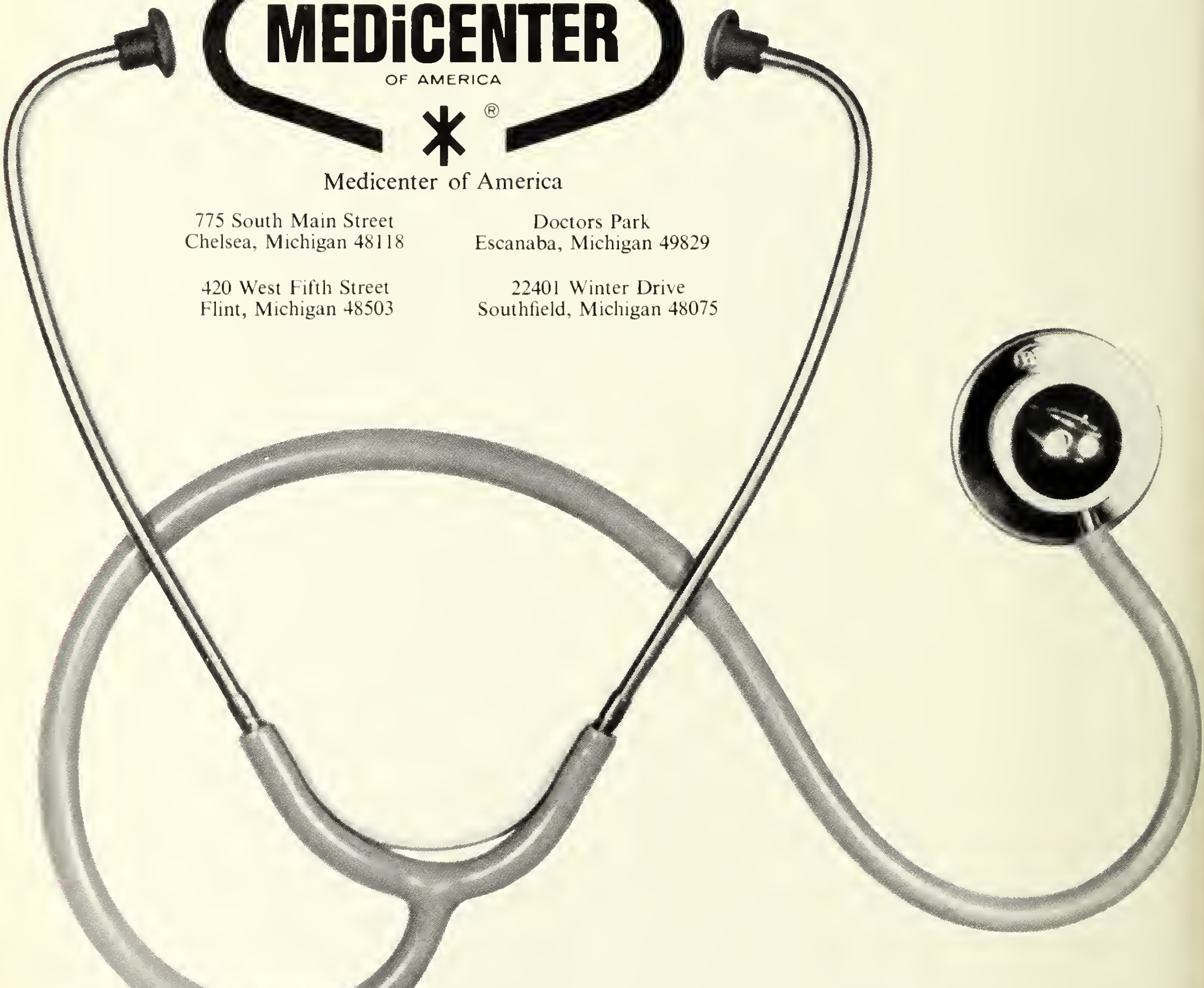

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Sound Off

Amphetamines: another magic pill bites the dust

By Richard C. Bates, MD
Lansing

The MSMS House of Delegates, as in a number of other state societies, has urged Michigan physicians to stop prescribing amphetamines for obesity. And so another magic pill bites the dust. What a wonderful dream it was, that the simple act of swallowing a few pills every day could make tubbies tiny.

How gullible we all have been, to perpetuate the myth of "diet" pills all these years. A glance about the room at any medical meeting should give ample evidence that there is no medical solution to obesity: If there were, there would be no "fat" doctors.

Of "fat doctors" we have, unfortunately, had more than enough. I originally became aware of the breed when carloads of obese Lansing women weekly drove a hundred miles northwest to a small town where they loaded up with multi-colored pills, bouyed by false hopes, camaraderie, and chemical stimulation. Shortly, a few local entrepreneurs set up local shops for the same purpose. One was rumored to have six practical nurses ladling out pills from barrels even while he sojourned in Florida.

The perpetuation of these senseless and dangerous practices for so long has been a verification of Osler's observation about man's credulity in embracing a pill for every ill, another example of the tale of the Emperor's clothes and an unnecessary further proof that any substance or act that changes mood is potentially habit-forming.

Fortunately, little physical harm has been done: a few died from the combination of amphetamines, digitalis and thyroid. Most of the patients lost weight for a few weeks, then regained, but continued on the medications because cessation precipitated depression. In time, most of them escaped serious dependency and went on to new enthusiasms: the drinking man's diet, the grapefruit diet, the "Air Force" ("Mayo") diet, intestinal short circuits, TOPS and Weight Watchers, Inc.

Moderate damage *was* done to our image, first, as we all prescribed pills that didn't work and, then, as a few of us unintentionally created and abetted the middle-aged, middle-class, largely-female equivalent of the speed freak.

Doctor Bates

Mr. Bush

Well, hopefully, amphetamines in Michigan medicine are dead. The dream of chemical weight reduction has led good physicians into stranger and more dangerous practices before now.

All the wasted money and effort, all those false hopes will not have been expended in vain if we remember that if a truly safe, successful remedy for obesity comes there will be neither "fat" doctors nor "fat doctors".

New news code adopted by MSMS 'a bold step'

By Larry Bush
Science Editor
The Ann Arbor News

The Michigan State Medical Society passed a resolution at its recent annual meeting which should make it easier for newsmen, including medical and science writers, to provide the reading public with information on medicine and medical research.

This is a bold step for a medical society in view of such restrictions as the American College of Surgeons' dictum that no member should give information to the news media until after it has appeared in a scientific journal and been appropriately approved for release. It also goes counter to the view of many physicians, in the past at least, that to have their names appear in print (not the

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This article is reprinted from a recent issue of THE ANN ARBOR NEWS. It is excerpted from Mr. Bush's regular column, "The Science Beat."

journals of course) is "advertising" and a cardinal sin.

It has always been easier to get news media articles from professionals in such fields as engineering and biology, for example. From a casual observer's viewpoint, jealousy between members of the profession, has appeared to play some role in this restriction on news by the health professions.

Of course there have always been rugged individuals in medicine who have not cared much what their colleagues thought or the societies advocated. Their number has been growing in recent years and the flow of information to the public greatly speeded up.

The medical staff at Ann Arbor's St. Joseph Mercy Hospital and many departments at the U-M Medical Center, with the exception of a few individuals, have always been most cooperative with the press. But the same hasn't been true everywhere, and in some cases even here.

A preamble to the revised code of the Michigan State Medical Society on relations with the communications media, which was brought to my attention by Louis Graff, U-M director of health science relations, points out that "an out-of-date code of ethics" has hindered the profession from being seen and heard.

The resolution states: "Resolved that the Michigan State Medical Society encourage all physicians in the state to contact the local outlets of the various communications media and make arrangements to use these media for the advancement of information on the present system of delivery of medical services, its cost and efficiency, as well as the progress medicine has made in the past several decades in promoting and improving the high health standards prevalent today.

"These matters to be accomplished with the consent of the local medical society and in accord with its local guidelines on the use of the media. Original and innovative ideas in carrying out this resolution are encouraged from all individual physicians, component medical societies and public relations committees."

Although it is somewhat mild mannered and still leaves the final decision on what information can be dispensed up to the local societies, which will probably result in spotty medical reporting, the resolution should open up medical reporting to some extent. But old habits die hard and some will probably still cling to what the society calls "out-of-date codes," which they feel are a form of protection of their professional image, particularly among their colleagues.

Doctor, your AMA-ERF contribution is needed!

By Mrs. Dean Carron
Michigan AMA-ERF chairman

Dear Doctor,

When you send your annual contribution to AMA-ERF, everyone benefits. And you may deduct the full amount from your income tax.

We hope you will name one of the Michigan medical schools as recipient, but you may name any medical school in the United States or Canada. Medical school deans like AMA-ERF money. It is not budgeted for operational expenses and can be directed for something special such as laboratory equipment, program enrichment or to meet the inflated cost of budgeted items.

Loan Guarantee Fund requests have increased with the reduction of prime bank interest rates. Early borrowers are starting to repay loans. Over 1,132 Michigan students have availed themselves of this opportunity to borrow money from a bank with repayment guaranteed by AMA-ERF. A pilot project is afoot in California to provide interest-free loans to needy medical students. Perhaps your county medical society might look into something like this for Michigan.

This fund also guarantees loans for interns and residents though most money is borrowed by medical students. The borrower is limited to $1,500 annually. Since this is a "last resort" fund, loaned to students who cannot provide loan security, it may make the difference between remaining in medical school and dropping out. All loan fund money goes in one hopper, so do not name a medical school for a loan fund contribution.

This year the Michigan goal is $10 a member, though many medical families give much more. The

Your AMA-ERF contribution is most important!

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1330 Glendaloch Circle
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Auxiliary fund contributions:
June 1, 1970-May 31, 1971: $28,163.01
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response to the envelopes sent from the AMA has resulted in more envelopes. Our overall collections, however, are very low as compared to the past few years for this period. Only $4,268 was collected from June 1st to December 31st.

The women of the county medical auxiliaries work very hard to earn money for AMA-ERF. They sell Christmas cards, stationery, In Memoriam, Thinking of You and In Honor contribution cards, Med-Educator "Hello Hospital" books for children, 21-jewel Swiss movement bracelet watches and other useful items. They hold parties, dinners, fashion shows and boutique sales. County Christmas cards raise about 40% of our total.

Let your wife's watch be a reminder to you to write a check for your own special support of the American Medical Association—Education and Research Foundation. The auxiliary, which is the official collection agency for the fund does not use any of the money for operating expenses. It is given in total, as you direct. Make your check payable to AMA-ERF Auxiliary Fund. Send it to your county auxiliary chairman or to me.

Here are 12 dos and don'ts for doctors in court

By J. H. Ahronheim, MD
Jackson

That most doctors do not like to testify in court is a well known fact; some unpleasant experience during court proceedings on one of their own cases may be the reason for this resentment. Unfortunately, no courses are given in medical school on how a doctor should conduct himself when called upon to testify, and whatever court experience a physician might have, is usually acquired the hard way.

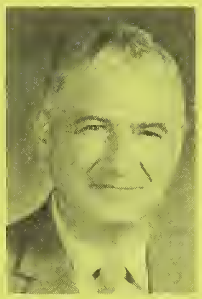
Thus, a few hints may be helpful.

When we are witnesses in a court case, we must realize that our testimony is apt to be favorable to one side and damaging to the other side, and that the attorney for the unfavorable side will use every courtroom tactic to discredit our testimony. By observing certain basic rules, we should be able to hold our own and to get out of the cross examination relatively unharmed.

The following set of rules will tell us what to do and what not to do.

1. Stick to facts. Don't ever suppose or presume. If you use any of these words, you will certainly be challenged. The court is interested only in what you know, not in what you assume.

(Continued on page 298)


Doctor Ahronheim

Doctor Wright

Community physician needs chance to learn latest techniques

(Editor's Note: Thomas B. Wright, MD, the immediate past president of the Bay-Arenac-Iosco Counties Medical Society, in a recent society Bulletin described his visit to the new Detroit Children's Hospital and was impressed with the "modernity of the place." He worried about "becoming dated and old," and offered the following comments about the constant need for continuing medical education.)

By Thomas B. Wright, MD
Immediate Past-President
Bay-Arenac-Iosco Counties Medical Society

"What can a middle-aged physician do in a small community a hundred miles from the nearest sizaable teaching centers, and with the maximum responsibilities of a lifetime, both family and practicewise?

Meetings and readings are obviously not the answer. I'd like to get in there—put down a C.V.C., pass an umbilical arterial cannula, write the orders, maybe even scrub in at open heart surgery—be closely involved instead of in the gallery.

At present, while difficult, there may be a few opportunities to do something like this, at least for a day or two at a time; but I do wish a way could be found making this easily possible, if not mandatory, for all of us.

Yes, there still is a chance to modernize, catch up, turn back the clock, in some ways—even though now it must be by personal sacrifice and individual effort. However, I believe that medicine on a local level as well as in the ivory towers must devise an entirely new plan to make this goal more readily and completely obtainable."

2. Be well prepared for your case. If you testify in one of your own cases, carry your records with you and don't hesitate to use them. If you testify as expert witness in a case other than your own, be sure that you are an expert, and are well acquainted with the pertinent literature on the subject. It is most embarrassing if you make a statement which, minutes later, is refuted by another physician, who cites recent medical reports contrary to yours.

3. If you are to be a witness in a case in which you have testified at a previous hearing, do not fail to go over your original testimony, or you might contradict yourself at the second hearing.

4. Never become angry while testifying. If you feel that your temper gets the best of you, contain yourself and force yourself to answer quietly and to the point. Outbursts of anger are a strike against you.

5. Never hesitate to say that you do not know. This is one statement which can not be challenged.

6. Often you may be asked questions during the cross examination which seem utterly irrelevant. Answer them but be on the alert; the questioning attorney is just probing and is trying to catch a weakness in your testimony.

7. Disqualify yourself from answering a question which pertains to a field in which you have no, or only limited, experience.

8. Refrain from exaggerated statements as to your experience in a particular disease entity. You may be inclined to say that you have seen "hundreds" of these cases, and in the cross examination it may be brought out that a dozen or two is closer to the truth.

9. While your testimony is apt to be favorable to one side, do not flavor it for or against either side; just testify to the true facts. If, prior to the trial, an attorney asks you to testify for him, tell him honestly, if you think that your testimony would be damaging to his case. Do not be guided by the promise of a high fee.

10. When discussing a case on the witness stand, place yourself in a layman's position and do not forget that you speak to persons who do not understand medical lingo. Use English words, whenever possible. Avoid even simple terms, such as "trauma", if you could just as well say "injury". Don't say "myocardial infarction", but "heart attack". Don't say "carcinoma" but "cancer". Don't say "electrolyte imbalance" but "chemical change in the fluids and tissues of the body".

11. Don't make a statement about something of which you have no personal knowledge. For example: Never say "The deceased had knife wounds"; how would you know it was a knife? Simply describe the wound as to location, size and apparent penetration. Do not say "he was hit by a car"; say "he was struck by a blunt force". You must refrain from expressing hearsay knowledge or you will certainly be challenged.

12. Never act as if you do the court a favor by appearing. When subpoenaed you have to come, and they know it. Your medical degree does not immunize you against a contempt of court charge.

As a rule, you will find that the court officials are most cooperative with physicians. They will see to it that you will not waste your valuable time sitting around a court room, waiting to be called to the stand. Almost invariably, they will extend to you the courtesy of a phone call when they get ready for your testimony. You will find that, after some experience, appearances in court as a witness need not be sources of harrassment and humiliation.

MILK
GEORGE WHITE

"WHY DON'T YOU SEE A DOCTOR ABOUT THAT ULCER?"

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Michigan Medicine
March 27, 1972, Volume 71, Number 10
Michigan State Medical Society
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UNOFFICIAL REPORT OF THE SPRING HOUSE OF DELEGATES MEETING

FOUNDATION FOR PEER REVIEW was approved at the spring meeting of the MSMS House of Dele-ates, March 20-21 in Detroit. The delegates approved articles of incorporation and by-aws for the Michigan Medical Programs, Inc., and authorized the MSMS Council to implemen t at its discretion.

HE SEVENTH DRAFT of the proposed articles was presented to the House, revised by a refer-nce committee, and then adopted by the delegates. The full text of the articles will ppear in the printed proceedings. The functions of the corporation, to be formed by SMS and the Michigan Assoc. of Osteopathic Physicians and Surgeons, shall be: "To romote, facilitate and improve peer review (a) By compiling and distributing necessary ata to local medical foundations; (b) By serving in an advisory capacity to any regional oundation desirous of assistance; (c) By working with any local group on an interim asis until such a group has set up its own foundation and it is functioning adequately; d) By carrying on pertinent foundation functions in areas where none is in operation nd when requested by the local medical society; (e) By acting as an appellate and/or udicial group."

N OTHER ACTION, Delegates considered 23 proposed resolutions, ranging from changes in nternal procedures to positions on public issues.

Y RESOLUTION the House of Delegates accepted the Relative Value Study Committee Report or 1971 without approval of the Michigan Society of Internal Medicine.

ELEGATES ALSO ADOPTED a resolution calling for MSMS to request legislation and adminis-rative changes necessary to provide payment for the private care of Medicaid patients ith psychiatric diagnosis by private physicians on both in-patient and out-patient asis. Resolutions were adopted reaffirming the MSMS request to Blue Shield for payment or elective sterilization on an in-patient or out-patient basis and, because of dis-atisfaction with Blue Shield Forms 968 and 5505, asking the Council to consider the easibility of a single insurance claims form which could be adapted by all third arty carriers. Another resolution called for peer review in disputes over necessity f hospitalization and diagnostic procedures.

NOTHER RESOLUTION ADOPTED instructs the MSMS Council to use all possible means to ac-omplish revision of laws to encourage employment of persons who are "mildly impaired hysically or potentially mildly disabled" by a waiver mechanism that would protect mployers from unfair responsibility under Workmen's Compensation Rules and Regulations. nother resolution calls for MSMS to remind the State Board of Education and the boards f registration of licensed therapists that programs of diagnosis and therapy for chil-ren with neurological disabilities evolved by local boards of education must be under he direct supervision of physicians to be within the law. Electromyographic needle xaminations can be performed only by a licensed physician and not by a non-physician nd later reviewed by a licensed physician.

EVERAL RESOLUTIONS DEALING WITH UTILIZATION OF FACILITIES AND COSTS of health care ere adopted. The MSMS Council, through the Legal Affairs Committee, was instructed to seek changes in federal and state regulations regarding payment of extended care costs to seek remedies to situations in which less expensive extended care facilities and nursing home services are being denied because of regulation, wording and interpretation. Delegates called for the MSMS Maternal Health Committee to study rules and policies of other states relative to the utilization of obstetrical beds for other than obstetrical cases and to report to the fall session.

DELEGATES APPROVED MSMS SUPPORT of the intent of a bill in the State Legislature to allow physicians to provide contraceptive assistance and counsel to teen-agers without parental consent and MSMS support of legislation which would change the sex education law to allow the teaching of birth control. Delegates endorsed the concept that educational programs on family planning should be made available to interested hospitalize patients.

THE HOUSE APPROVED A RESOLUTION calling for submission of resolutions to be considered at future sessions 30 days prior to the commencement of the session, but authorizing the Speaker of the House and the Committee on Rules and Order of Business to determine which resolutions are either urgent or important and are to be received after the deadline for presentation. Another resolution calls for setting the first session of future House meetings, where practicable, on the afternoon of the first day and the scheduling of a minimum number of evening meetings, except for the Presidential inaugural.

THE MSMS COUNCIL was authorized to make a recommendation to the House on a request for a separate charter for Gratiot County as a component medical society. An approved bylaws change provides that delegates elected by component medical societies be seated at the first regularly scheduled sessions of the House following certification by component societies. Also approved were a provision that the certified annual audit of the MSMS be reviewed on a yearly basis by the Ways and Means Committee at the spring session of the House. The present system of per diem reimbursement for the legislative Doctor of the Week was continued.

RESOLUTIONS ADOPTED BY THE HOUSE relating to the AMA provide that: "The House of Delegates of the MSMS firmly support the position that a reassessment of the AMA structure, function and purpose is urgent at this time, in order to better represent the physician of this country" and "MSMS meet in open session during the 1972 annual meeting...to take testimony regarding these matters from its members, either as individuals or organizations, and that a written summary be forwarded to the AMA Council on Long Range Planning and Development."

March 27, 1972 Vol. 71, No. 10

Michigan
Medicine

MICHIGAN STATE MEDICAL SOCIETY

Published three times each month and four times in December and January, 38 issues, by the Michigan State Medical Society as its official journal. Second class postage paid at East Lansing, Mich. and at additional mailing offices. Yearly subscription rate, $9.00. Printed in USA. All communications should be addressed to the Publications Committee, Michigan State Medical Society, 120 West Saginaw Street, East Lansing, Michigan 48823. © 1972 Michigan State Medical Society. Phone: Area Code 517, 337-1351.

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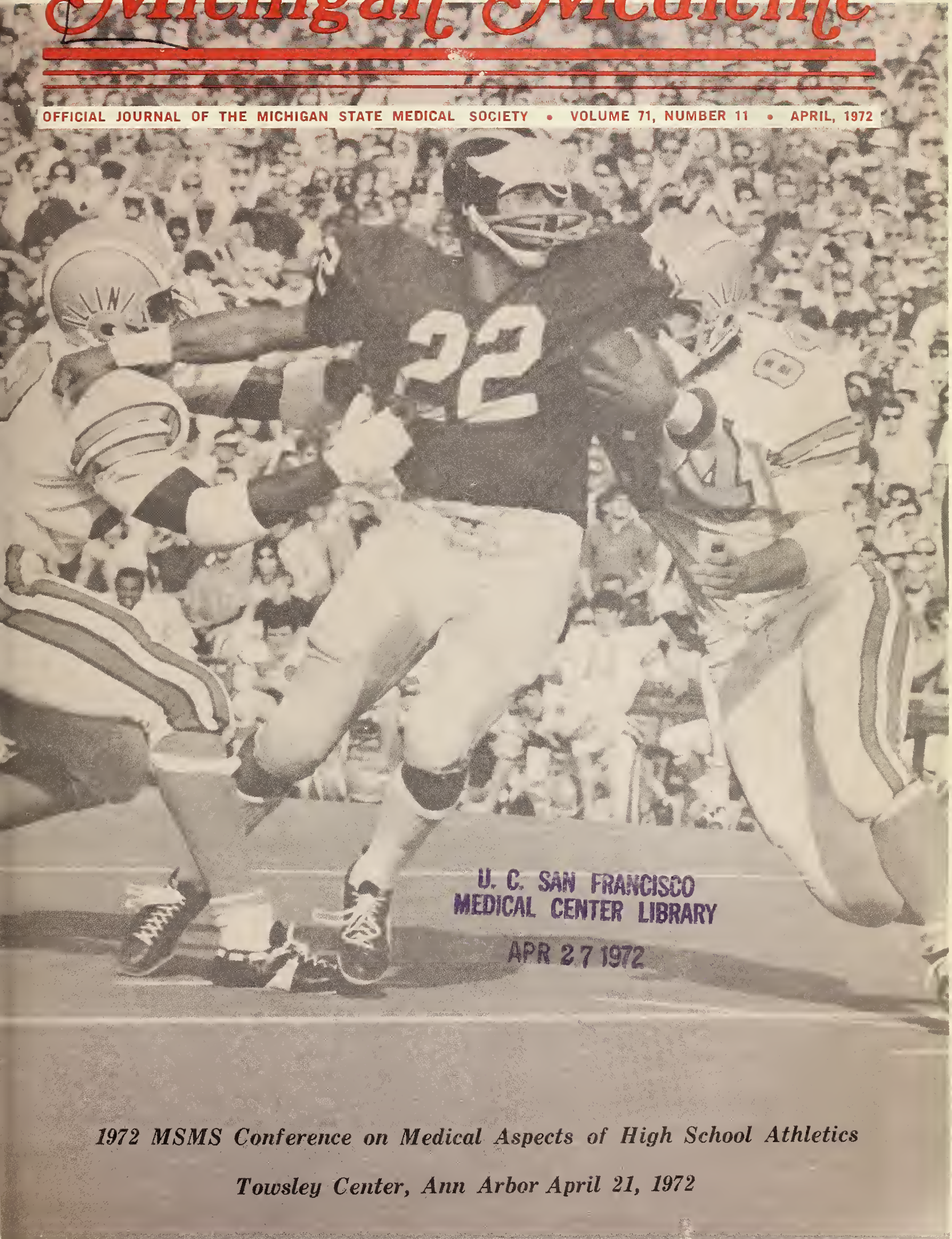

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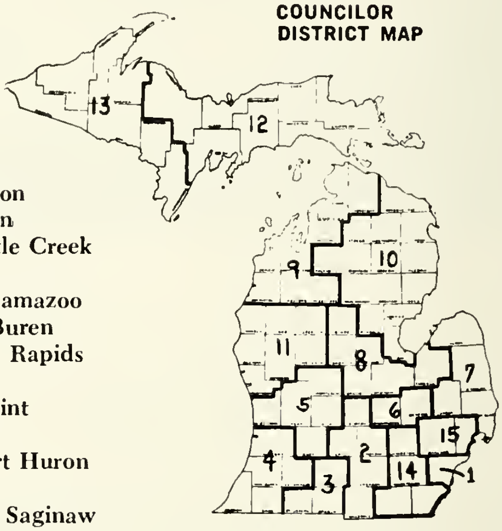
COUNCILOR DISTRICT MAP



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Third District Councilor: Robert M. Leitch, MD, Battle Creek
  Counties: Branch, Calhoun, St. Joseph
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  Counties: Allegan, Berrien, Cass, Kalamazoo, Van Buren
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Sixth District Councilor: Ernest P. Griffin, Jr., MD, Flint
  Counties: Genesee, Shiawassee
Seventh District Councilor: James H. Tisdel, MD, Port Huron
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  Counties: Grand Traverse-Leelanau-Benzie, Manistee, Northern Michigan (Antrim, Charlevoix, Cheboygan and Emmet combined), Wexford-Missaukee
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Fourteenth District Councilor: Donato F. Sarapo, MD, Adrian
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President's page

Sidney Adler, MD
MSMS president

At the spring meeting of the House of Delegates on March 20-21, 1972, the three previously-reported issues were considered:

I) The House of Delegates voted to take the necessary steps to form a separate foundation (corporation) separate from the Michigan State Medical Society and to negotiate with the Michigan Society of Osteopathic Physicians and Surgeons to form the permanent foundation. The general consensus was to limit its function to peer review. The above decision was passed by a majority; it was not a unanimous vote of the House of Delegates.

There was much apprehension regarding H.R. I, the so-called Bennett Amendment. This has not passed the Congress in its final form. Politics, be they medical or otherwise, should not be our primary motivation or consideration. Just how much consumer representation (if any) will be required in its final guidelines and mechanisms is unknown at this time.

It seems to me that we should begin slowly and avoid many of the pitfalls that several other state and local foundations have had (litigations, etc.). Our goal should be to upgrade the standards of medical care and identify the needs of the public and the medical profession in the delivery of health care. This will necessitate careful analysis of hospital, home and office care, and will require participation by all physicians, both on teaching and auditing levels, to understand its many facets. The road will be hard and arduous.

Patterns and utilization review of how medicine is practiced must be studied. It cannot be done in a haphazard manner. The medical profession must be informed either by seminars or workshops on all local levels. Medicine is not an exact science and any "cookbook approach" might turn the long overdue project into a "paper tiger."

There is no longer any time to delay. Failure to accomplish its goals leaves no position but retreat. At present, there is no way to predict whether this approach will reduce medical costs.

II) The House of Delegates accepted the relative value schedule without a schedule in internal medicine. The schedule was stated to be merely a "guideline." I believe this will be a fee schedule in a short time, as one has only to add a *conversion factor*. The fiscal impact of the schedule was not discussed.

The Michigan Relative Value Schedule is uniform for all physicians regardless of training and specialty. There is no area differentiation. It seems that a differential adjustment must be made for interns, residents, etc. A physician's skill, experience, capability and willingness to work should be vital factors in making any determination of "values."

III) The report of the Alexander Grant Study, Phase II, was referred for further consideration. It was recommended also that an AMA team be requested to review the study. This, it seems, would give a medical flavor to a medical problem.

The recommendation of Phase II including such things as redistricting our present councillor districts and the duties of The Council and the officers of MSMS are some of the major concerns in this study. A review of the study reveals that the grassroots members are unhappy with the present structure and functioning of our society.

There undoubtedly will be changes. It is hoped that it will be productive and orderly after much deliberation.

The road ahead for all of these three vital issues will call on all physicians to participate, hopefully on a voluntary basis.

Our goals should be to improve the delivery of health care to all of our patients. Poor care is more expensive than good care to all concerned. A high standard of care is costly, but less expensive in the long run.

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Publication of **Michigan Medicine** is under the direction of the Publication Committee, Michigan State Medical Society. The scientific editor is responsible for the scientific content. The managing editor is responsible for the production, correspondence and contents of the journal. He and the executive editor share final responsibility of the entire publication.

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1. Address scientific manuscripts to the Publication Committee, Michigan State Medical Society, 120 West Saginaw Street, East Lansing, Michigan 48823. Submit original, double-spaced typewritten copy and two carbon copies or photo copies on letter size (8½ x 11 inch) paper. On page one, include title, authors, degrees, academic titles, and any institutional or other credits.

2. Authors are responsible for all statements, methods, and conclusions. These may or may not be in harmony with the views of the Editorial Staff. It is hoped that authors may have as wide a latitude as space available and general policy will permit. The Publication Committee expressly reserves the right to alter or reject any manuscript, or any contribution, whether solicited or not.

3. Illustrations should be submitted in the form of glossy prints or original sketches from which reproductions will be made by Michigan Medicine.

4. Articles should ordinarily be less than four printed pages in length (3000 words).

5. References should conform to *Cumulative Index Medicus*, including, in order: Author, title, journal, volume number, page, and year. Book references should include editors, edition, publisher, and place of publication, as well.

6. The editors welcome, and will consider for publication, letters containing information of interest to Michigan physicians, or presenting constructive comment on current controversial issues. News items and notes are welcome.

7. It is understood that material is submitted for exclusive publication in Michigan Medicine.

MICHIGAN MEDICINE is the official organ of the Michigan State Medical Society, published under the direction of the Publication Committee. Published Semi-Monthly, Trimonthly in January and December; 26 issues, by the Michigan State Medical Society as its official journal. Second class postage paid at East Lansing, Mich. and at additional mailing offices. Yearly subscription rate, $9.00; single copies, 80 cents. Additional postage: Canada, $1.00 per year; Pan-American Union, $2.50 per year; Foreign, $2.50 per year. Printed in USA. All communications relative to manuscripts, advertising, news, exchanges, etc., should be addressed to Judith Marr, Michigan State Medical Society, 120 West Saginaw Street, East Lansing, Michigan 48823. Phone Area Code 517, 337-1351.
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rheumatoid arthritic blowup...

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Important Note: This drug is not a simple analgesic. Do not administer casually. Carefully evaluate patients before starting treatment and keep them under close supervision. Obtain a detailed history, and complete physical and laboratory examination (complete hemogram, urinalysis, etc.) before prescribing and at frequent intervals thereafter. Carefully select patients, avoiding those responsive to routine measures, contraindicated patients or those who cannot be observed frequently. Warn patients not to exceed recommended dosage. Short-term relief of severe symptoms with the smallest possible dosage is the goal of therapy. Dosage should be taken with meals or a full glass of milk. Patients should discontinue the drug and report immediately any sign of: fever, sore throat, oral lesions (symptoms of blood dyscrasia); dyspepsia, epigastric pain, symptoms of anemia, black or tarry stools or other evidence of intestinal ulceration or hemorrhage, skin reactions, significant weight gain or edema. A one-week trial period is adequate. Discontinue in the absence of a favorable response. Restrict treatment periods to one week in patients over sixty.

Indications: Acute gouty arthritis, rheumatoid arthritis, rheumatoid spondylitis.

Contraindications: Children 14 years or less; senile patients; history or symptoms of G.I. inflammation or ulceration including severe, recurrent or persistent dyspepsia; history or presence of drug allergy; blood dyscrasias; renal, hepatic or cardiac dysfunction; hypertension; thyroid disease; systemic edema; stomatitis and salivary gland enlargement due to the drug; polymyalgia rheumatica and temporal arteritis; patients receiving other potent chemotherapeutic agents, or long-term anticoagulant therapy.

Warnings: Age, weight, dosage, duration of therapy, existence of concomitant diseases, and concurrent potent chemotherapy affect incidence of toxic reactions. Carefully instruct and observe the individual patient, especially the aging (forty years and over) who have increased susceptibility to the toxicity of the drug. Use lowest effective dosage. Weigh initially unpredictable benefits against potential risk of severe, even fatal, reactions. The disease condition itself is unaltered by the drug. Use with caution in first trimester of pregnancy and in nursing mothers. Drug may appear in cord blood and breast milk. Serious, even fatal, blood dyscrasias, including aplastic anemia, may occur suddenly despite regular hemograms, and may become manifest days or weeks after cessation of drug. Any significant change in total white count, relative decrease in granulocytes, appearance of immature forms, or fall in hematocrit should signal immediate cessation of therapy and complete hematologic investigation. Unexplained bleeding involving CNS, adrenals, and G.I. tract has occurred. The drug may potentiate action of insulin, sulfonylurea, and sulfonamide-type agents. Carefully observe patients taking these agents. Nontoxic and toxic goiters and myxedema have been reported (the drug reduces iodine uptake by the thyroid). Blurred vision can be a significant toxic symptom worthy of a complete ophthalmological examination. Swelling of ankles or face in patients under sixty may be prevented by reducing dosage. If edema occurs in patients over sixty, discontinue drug.

Precautions: The following should be accomplished at regular intervals: Careful detailed history for disease being treated and detection of earliest signs of adverse reactions; complete physical examination including check of patient's weight; complete weekly (especially for the aging) or an every two week blood check; pertinent laboratory studies. Caution patients about participating in activity requiring alertness and coordination, as driving a car, etc. Cases of leukemia have been reported in patients with a history of short- and long-term therapy. The majority of these patients were over forty. Remember that arthritic-type pains can be the presenting symptom of leukemia.

Adverse Reactions: This is a potent drug; its misuse can lead to serious results. Review detailed information before beginning therapy. Ulcerative esophagitis, acute and reactivated gastric and duodenal ulcer with perforation and hemorrhage, ulceration and perforation of large bowel, occult G.I. bleeding with anemia, gastritis, epigastric pain, hematemesis, dyspepsia, nausea, vomiting and diarrhea, abdominal distention, agranulocytosis, aplastic anemia, hemolytic anemia, anemia due to blood loss including occult G.I. bleeding, thrombocytopenia, pancytopenia, leukemia, leukopenia, bone marrow depression, sodium and chloride retention, water retention and edema, plasma dilution, respiratory alkalosis, metabolic acidosis, fatal and nonfatal hepatitis (cholestasis may or may not be prominent), petechiae, purpura without thrombocytopenia, toxic pruritus, erythema nodosum, erythema multiforme, Stevens-Johnson syndrome, Lyell's syndrome (toxic necrotizing epidermolysis), exfoliative dermatitis, serum sickness, hypersensitivity angiitis (polyarteritis), anaphylactic shock, urticaria, arthralgia, fever, rashes (all allergic reactions require prompt and permanent withdrawal of the drug), proteinuria, hematuria, oliguria, anuria, renal failure with azotemia, glomerulonephritis, acute tubular necrosis, nephrotic syndrome, bilateral renal cortical necrosis, renal stones, ureteral obstruction with uric acid crystals due to uricosuric action of drug, impaired renal function, cardiac decompensation, hypertension, pericarditis, diffuse interstitial myocarditis with muscle necrosis, perivascular granulomata, aggravation of temporal arteritis in patients with polymyalgia rheumatica, optic neuritis, blurred vision, retinal hemorrhage, toxic amblyopia, retinal detachment, hearing loss, hyperglycemia, thyroid hyperplasia, toxic goiter association of hyperthyroidism and hypothyroidism (causal relationship not established), agitation, confusional states, lethargy; CNS reactions associated with overdosage, including convulsions, euphoria, psychosis, depression, headaches, hallucinations, giddiness, vertigo, coma, hyperventilation, insomnia; ulcerative stomatitis, salivary gland enlargement.
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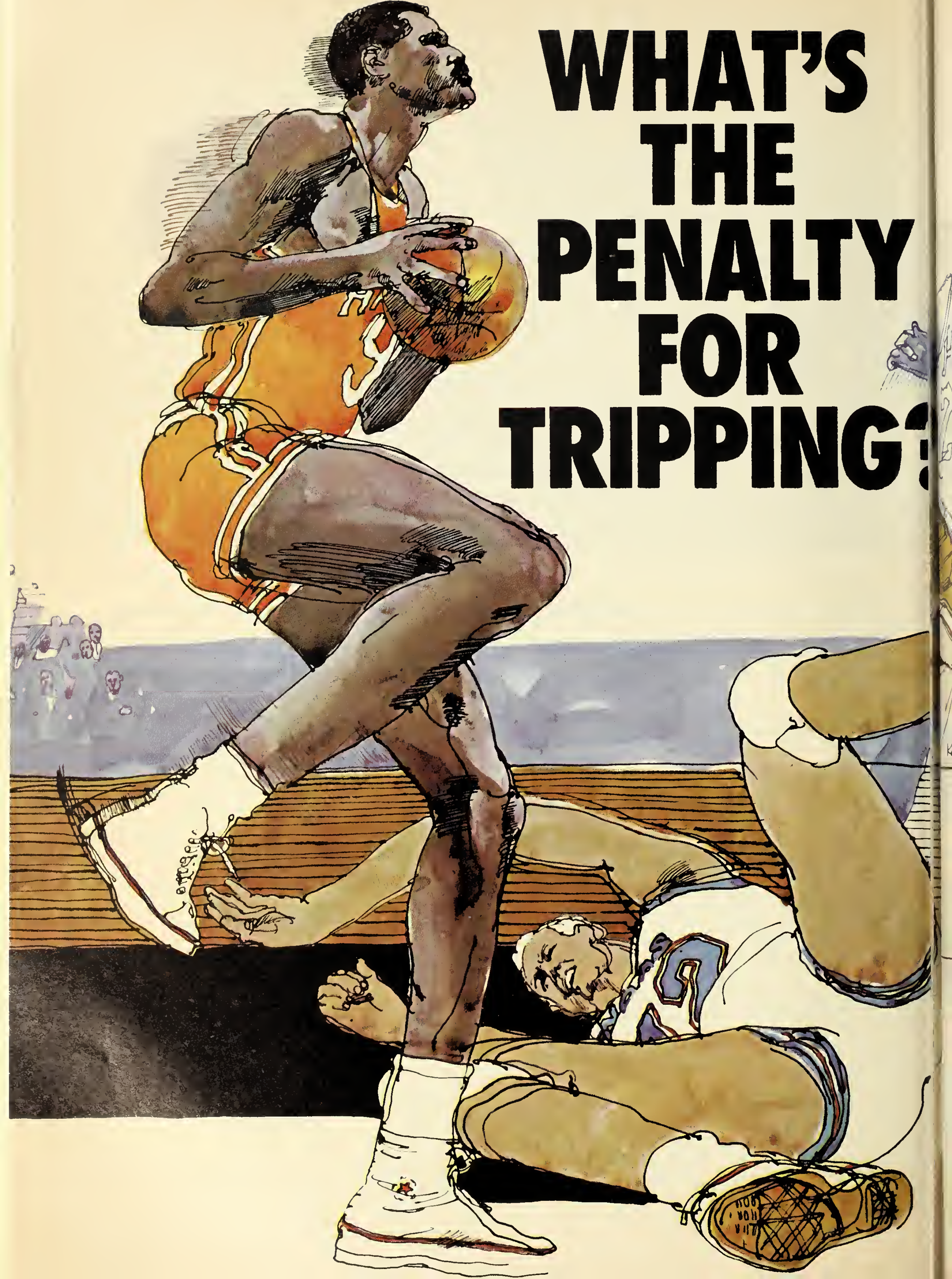

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Ken Dallison

A personal foul against the tripper, and possibly weeks of painful skeletal muscle spasm for the victim.

For the skeletal muscle spasm of leg strains, Valium® (diazepam) can be a valuable adjunct. A dose of 2-10 mg, three or four times a day, goes to work to help break up the cycle of spasm/pain/spasm. The resultant relief of skeletal muscle spasm may permit greater mobilization of the affected muscles and may help the patient resume usual activities sooner than otherwise possible.

Sudden trauma to and unusual stress on sartorius muscle may cause strain of muscle and tearing of some of the fibers. The resultant muscle spasm can make leg motion painful.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

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***Indications:** Edema associated with congestive heart failure, cirrhosis of the liver, the nephrotic syndrome, late pregnancy; also steroid-induced and idiopathic edema, and edema resistant to other diuretic therapy. 'Dyazide' is also indicated in the treatment of mild to moderate hypertension.

Contraindications: Pre-existing elevated serum potassium. Hypersensitivity to either component. Continued use in progressive renal or hepatic dysfunction or developing hyperkalemia.

Warnings: Do not use dietary potassium supplements or potassium salts unless hypokalemia develops or dietary potassium intake is markedly impaired. Enteric-coated potassium salts may cause small bowel stenosis with or without ulceration. Hyperkalemia (>5.4 mEq/L) has been reported in 4% of patients under 60 years, in 12% of patients over 60 years, and in less than 8% of patients overall. Rarely, cases have been associated with cardiac irregularities. Accordingly, **check serum potassium during therapy, particularly in patients with suspected or confirmed renal insufficiency (e.g., certain elderly or diabetics). If hyperkalemia develops, substitute a thiazide alone. If spironolactone is used concomitantly with 'Dyazide', check serum potassium frequently**—they can both cause potassium retention and sometimes hyperkalemia. Two deaths have been reported in patients on such combined therapy (in one, recommended dosage was exceeded; in the other, serum electrolytes were not properly monitored). Observe regularly for possible blood dyscrasias, liver damage or other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving Dyrenium (triamterene, SK&F). Rarely, leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with the thiazides. Watch for signs of impending coma in acutely ill cirrhotics. Thiazides are reported to cross the placental barrier and appear in breast milk. This may result in fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly other adverse reactions that have occurred in the adult. When used during pregnancy or in women who might bear children, weigh potential benefits against possible hazards to fetus.

Precautions: Do periodic serum electrolyte and BUN determinations. Do periodic hematologic studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in postsympathectomy patients. The following may occur: hyperuricemia and gout, reversible nitrogen retention, decreasing alkali reserve with possible metabolic acidosis, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), digitalis intoxication (in hypokalemia). Use cautiously in surgical patients. Concomitant use with antihypertensive agents may result in an additive hypotensive effect.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis; rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting (may indicate electrolyte imbalance), diarrhea, constipation, other gastrointestinal disturbances. Rarely, necrotizing vasculitis, paresthesias, icterus, pancreatitis, and xanthopsia have occurred with thiazides alone.

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DZ-106

Friday, April 21, 1972

Towsley Center
The University of Michigan
Ann Arbor

1972 Conference On Medical Aspects Of High School Sports

Sponsored by the Michigan State Medical Society; Michigan chapter, American College of Emergency Physicians, and the University of Michigan Towsley Center.

High school team physicians, coaches and trainers will hear experts in the medical care of the athlete at the Seventh Annual Conference on the Medical Aspects of High School Sports April 21 at Towsley Center for Continuing Medical Education, The University of Michigan.

This year's conference is planned in conjunction with the annual U-M Conference for High School football coaches and trainers April 21-22, which will be followed by the annual U-M Spring Football Game Saturday afternoon, April 22.

Interested persons must pre-register for the luncheon, at a total cost of $4.50 for program and meal. (See coupon below) The fee is $2 for program only.

Here is the complete program:

9-9:30 a.m. *Registration*

9:45-10:15 a.m. *"Athletic Injuries of the Hand"*
Dean Lewis, MD, orthopaedic surgeon, U-M Medical Center

10:15-10:45 a.m. *"Triage and Evaluation of the Injured Athlete"*
Joseph S. Torg, MD, orthopaedic surgeon, Temple University Medical School, Philadelphia

10:45-11:15 a.m. *"Follow-up Study on Injury as a Result of Blocking at the Knee"*
Thomas Peterson, MD, orthopaedic surgeon, Ann Arbor

11:45-1 p.m. *Luncheon*—Towsley Center

1-1:30 p.m. *"Effects of Shoe Type and Cleat Length on Incidence and Severity of Knee Injuries Among High School Football Players"*
Joseph S. Torg, MD

1:30-2 p.m. *Demonstrations of techniques in diagnosing knee injuries*

2-2:30 p.m. *Rehabilitation techniques in acute and chronic knee injuries*
Lindsey McLean, RPT, head trainer, U-M

2:30-3:30 p.m. Panel discussion—*"Treatment of Knee Injuries"*
Moderator: William Redmon, MD, Midland
Participants:
Conservation treatment—James Feurig, MD, team physician, Michigan State University
High school team physician's viewpoint—Robert Evans, MD, Sturgis
Operative treatment—Joseph Torg, MD
Coaches' viewpoint—Paul Cummings, line coach and defensive coordinator, Plymouth High School
Trainer's viewpoint—Lindsey McLean, RPT

REGISTRATION FORM

Return to: **MEDICAL ASPECTS OF HIGH SCHOOL SPORTS**
Department of Postgraduate Medicine
The University of Michigan Medical Center
Towsley Center for Continuing Medical Education
Ann Arbor, Michigan 48104

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ADDRESS______________________________________

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I would like _____ tickets for the luncheon and program on April 21. (Total cost $4.50)

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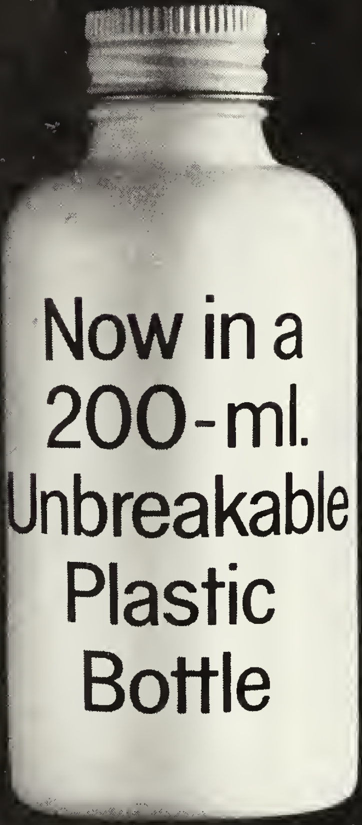
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Scientific papers

Lupus erythematosus

By Leon Herschfus, DDS
Detroit

Lupus Erythematosus, a disease of probable auto-immune pathogenesis, is a chronic, dystrophic, degenerative connective tissue illness with protean clinical manifestations.

All collagen disorders have one feature in common; i.e., the clinical signs and symptoms are the result of connective tissue injury.[1] Since skin and mucous membrane consist primarily of this substance, there are dermal and oral manifestations of collagen diseases. Some cutaneous signs are specific for these entities, and other findings merely suggest the presence of a connective tissue abnormality.

The above collagen disease concept, dating back to Klemperer, is not supported by present data, but it serves a useful purpose in the presentation of the cutaneous and oral manifestations. In actuality, lupus erythematosus is a classic prototype of auto-immune diseases characterized by a constellation of autoantibodies against numerous components of the body.

The disease is usually described as occurring in two forms:

1) Chronic or discoid lupus erythematosus (cutaneous).

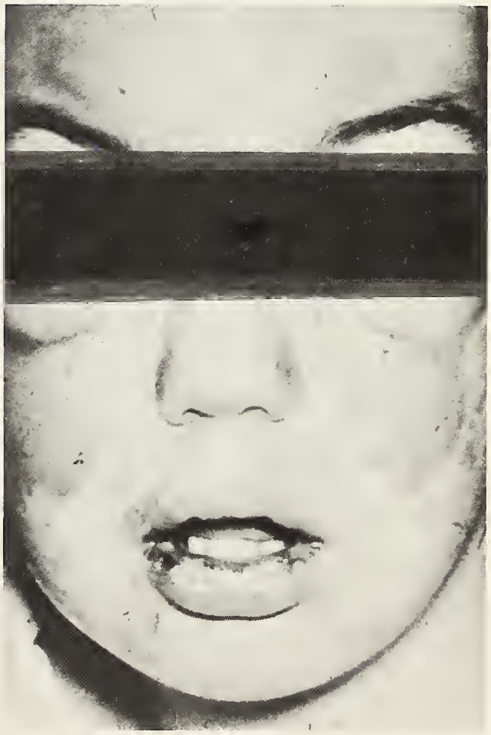
2) Systemic or disseminated erythematosus (visceral) with its acute, subacute and chronic varieties.

Although the cutaneous and visceral forms appear related, the clinical course, pathology and prognosis differ markedly.

CHRONIC DISCOID LUPUS is essentially a cutaneous disorder which usually affects the face involving cheeks and bridge of the nose, resulting in a "butterfly" distribution (Fig. 1). However, the process is not limited to this area and may involve other zones of the face, oral mucous membranes, lips, scalp, ears, neck, chest and extremities. The lesions usually occur as erythematous, greasy, scaling plaques with focal atrophy, follicular plugging and telangiectasia. These processes are sharply defined, i.e., discoid.

If the cutaneous involvement is widespread, the term "chronic disseminated discoid lupus" is commonly used. Except for the cutaneous lesions, this form of lupus erythematosus is usually asymptomatic. Exacerbations and extensions of the lesions may occur, especially in the spring and summer, because of exposure to sunlight.

Fig. 1. Typical "butterfly" pattern of Lupus Erythematosus with lower lip involvement. Through courtesy of Alice Palmer, MD.



Doctor Herschfus is chief, Department of Dental Surgery, Mount Carmel Mercy Hospital and Medical Center in Detroit.

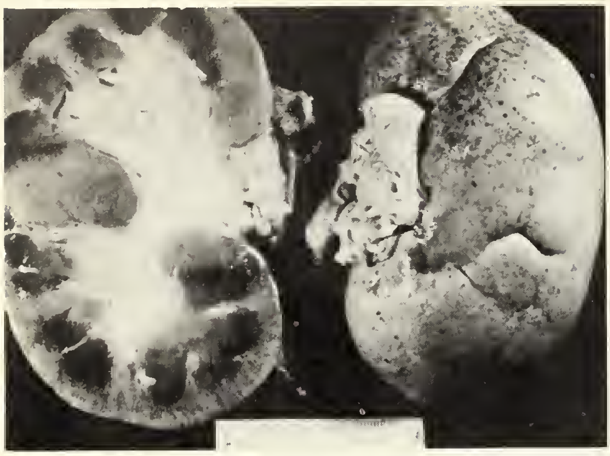


Fig. 2. Moderately enlarged hyperemic kidneys with petechial hemorrhages on subcapsular surfaces.

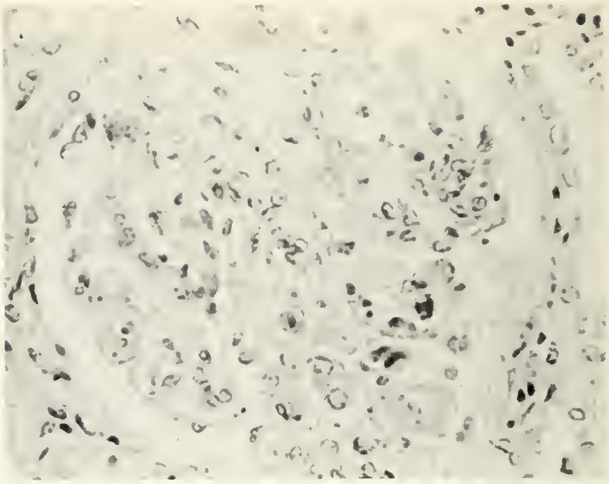


Fig. 3. Kidney revealing proliferative glomerulitis and wire loop capillaries.

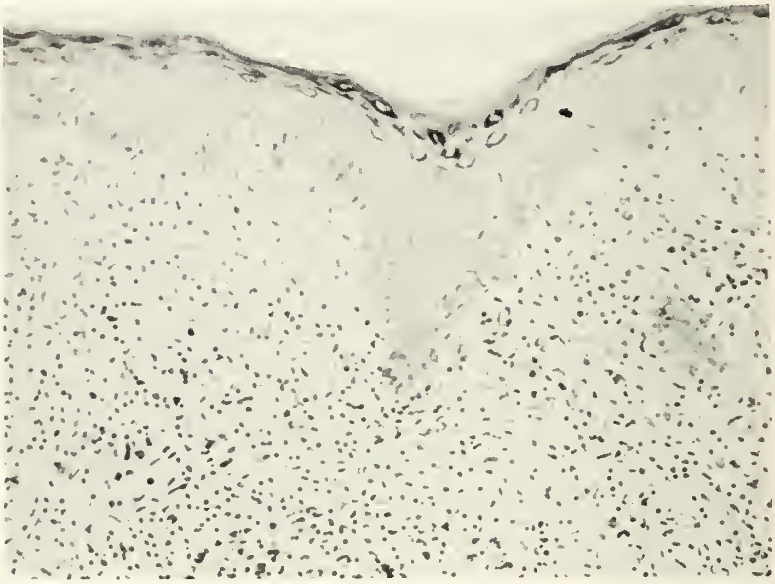


Fig. 4. Skin showing liquefaction degeneration of basal cells and lymphocytic infiltration of dermis compatible with diagnosis of Lupus Erythematosus.

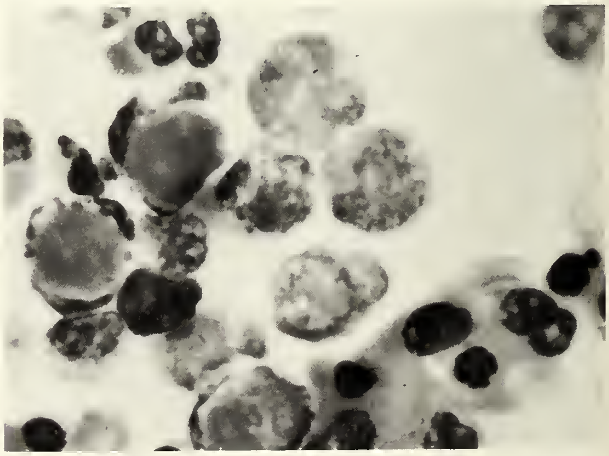


Fig. 5. Smear revealing multiple L.E. cells.

About 25% of the patients with chronic lupus erythematosus have oral lesions,[2,3,4,5] which usually coexist with the cutaneous manifestations. Occasionally the oral mucosal lesions may precede the dermal eruption. The buccal mucosa and vermilion border are the areas most often involved.[6,7] The lips, particularly the lower lip (**Fig. 1**), are frequently affected.[8]

DISSEMINATED LUPUS ERYTHEMATOSUS is characterized by severe systemic symptoms since the involvement is more widespread. It is a disease of connective tissue and small blood vessels, and may involve any organ, but in particular, the kidney and heart (**Figs. 2 and 3**). Formerly it was considered as a cutaneous disease, but now the condition is recognized and diagnosed without cutaneous manifestations. The clinical pattern is usually quite variable since one organ may be involved at a time, or different organs may be involved at different times, or simultaneously.

The picture is dominated by severe symptoms of fever, weight loss, pain in muscles and joints as well as blood changes such as anemia, leukopenia and hypergammaglobulinemia.[9] In addition, mucocutaneous lesions, subcutaneous nodules, photosensitivity,[10,11] generalized lymphadenopathy and cardiac, pulmonary, pleural, hepatic, gastrointestinal, ocular and renal involvement may occur. The above manifestations may be symptoms and signs seen at various times in multiple combinations.

Systemic lupus erythematosus in its acute form may be a fulminating disease with death occurring within a few weeks. Patients with subacute or chronic systemic lupus may live a few years or longer. Death is usually due to renal insufficiency, intercurrent pulmonary infection in a weakened patient, or cardiac involvement and heart failure.

Oral lesions in disseminated lupus erythematosus are more pronounced with a greater tendency to bleeding and ulceration, particularly in the acute phase of the disease.[12]

This disorder has a predilection for females between puberty and menopause, but the disseminated form may affect children, newborns[13,14,15] and postmenopausal women, as shown in our case report. In children, the peak incidence is between 10-13 years of age.[16] In adults, the peak incidence is during the child-bearing age.

Pathology

The characteristic histologic findings in lupus erythematosus are fibrinoid degeneration, mucoid degeneration, acute vasculitis and collagenous fibrosis and hyalinization. Any organ in the body can be affected, causing an array of clinical and laboratory signs, symptoms and findings.[17,18,19]

The concept that discoid and systemic lupus erythematosus are different entities has been promoted in textbooks for decades, but recent evidence indicates that the two processes are merely different manifestations of the same basic disorder. An array of antinuclear antibodies are found in both varieties.[20] One cannot determine from the clinical or histologic examination of a discoid-appearing lesion whether or not there is systemic involvement. Only the history, physical examination and laboratory findings will settle that point of diagnosis.

In the discoid variety, the epidermis undergoes alternating acanthosis and atrophy associated with local liquefaction necrosis of the basal cell layer. Conical keratotic plugs and sebaceous atrophy may occur. The latter is one of the earliest follicular changes in the pilosebaceous follicles (**Fig. 4**). The dermis reveals hyperemic changes of the papillary and subpapillary layers with dense collections of lymphocytes and melanophores in the upper and midportions. This lymphocytic infiltrate is the most prominent dermal sign and may be diffusely scattered through all layers of the dermis.[21] In the latter stage, there is focal destruction of elastic fibers resulting in a merging of collagenous and elastic fibers, a feature of considerable diagnostic value in chronic lupus erythematosus.

It must be emphasized that the histopathologic changes observed in the skin and mouth are nonspecific and lack of specificity of cutaneous lesions may well be a reflection of the limited number of ways in which the skin and connective tissues can react to injury.

Pinkus states: "Lupus erythematosus of the oral mucosa cannot be differentiated from lichen planus with any degree of assurance."[22] Actually, the epidermal changes are similar to those of lichen planus. However, keratotic plugging is usually absent from lesions of the buccal mucosa and tongue.

As with the discoid variety, we find the above alterations in the systemic lupus erythematosus as changes occur in the connective tissue at multiple sites and origins. The heart, kidneys, vessels, skin, pericardial and pleural surfaces, lungs and lymphoid tissues are chiefly affected.

The finding of L.E. cells in a patient suspected of having systemic lupus is strong supportive evidence of such a diagnosis. The L.E. cells were first described in bone marrow by Hargraves, Richmond and Morton.[23] Ultimately, as technics improved, the peripheral blood was found suitable for such testing (**Fig. 5**). Hargraves' initial work and subsequent modification of the L.E. test by Haserick, Lewis and Bortz[24] and Zinkham and Conley,[25] gave us a procedure which is a landmark in the diagnosis and treatment of lupus erythematosus disseminatus, since this test is routinely negative in patients with discoid lupus erythematosus.

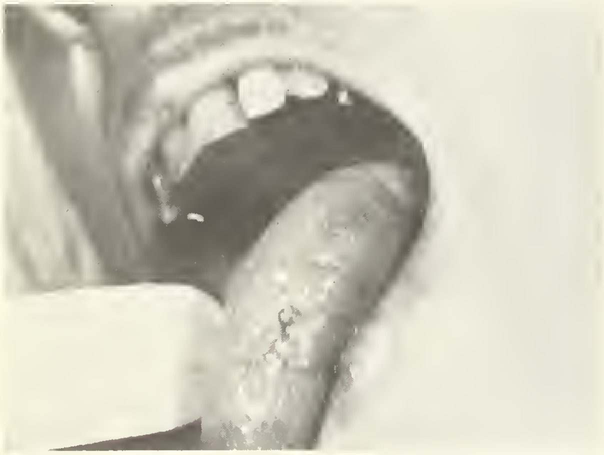


Fig. 6. Deep ulceration on left lateral margin of the tongue.

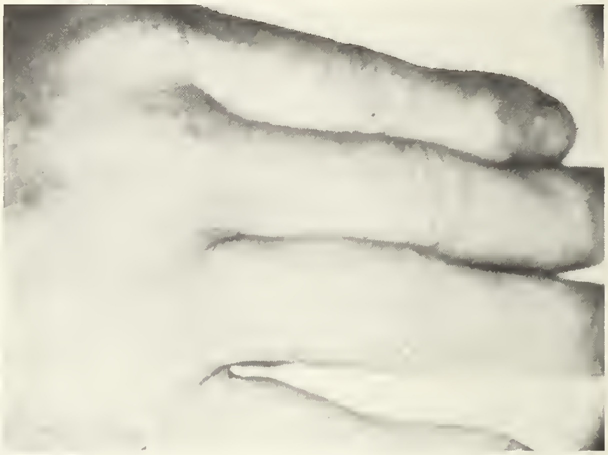


Fig. 7. Fingertips with evidence of arthritic deformities and erythema. Note ulcerations on knuckles.

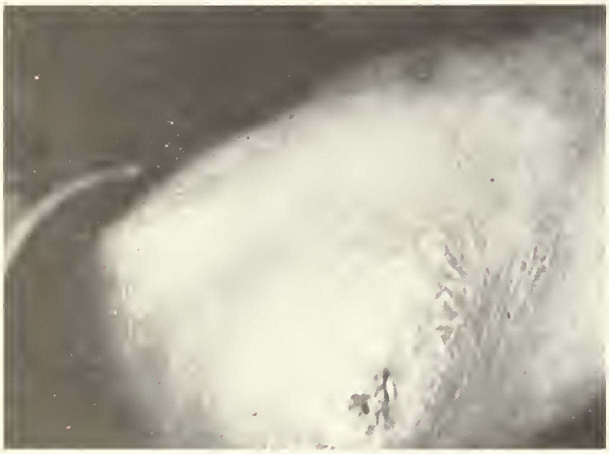


Fig. 8. Elbow with ulceration and slightly undermined edges.

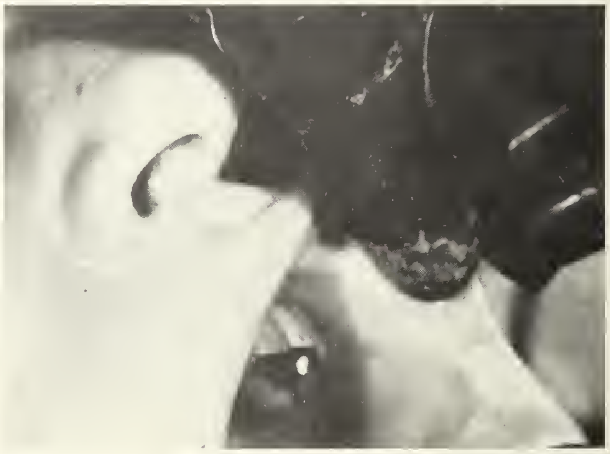


Fig. 10. Eroded bluish-red lesion on the buccal mucosa of left cheek near the commissure.

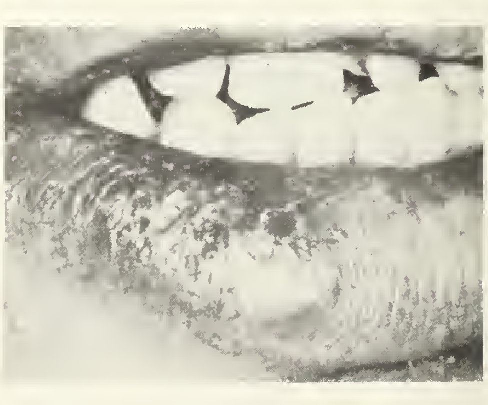


Fig. 9. Crusted areas on lips.

However, L.E. cells may be observed in patients with pernicious anemia, hemolytic anemia, periarteritis nodosa, dermatomyositis, scleroderma, drug hypersensitivity, rheumatoid arthritis, hepatitis and hydralazine syndrome. L.E. phenomenon is usually diagnostic of disseminated lupus erythematosus. Repeated L.E. tests are positive in approximately 75-100% of patients who have clinically typical cases. A single random test will only be positive in 25-40% of systemic lupus cases. The formation of the L.E. cell in patients with systemic lupus is dependent upon the presence of the L.E. plasma factor, which is known to be a 7S gamma globulin. It has the characteristics of antibody globulin and the antigen with which it reacts is closely associated with nuclear deoxyribonucleoprotein (histone + deoxyribonucleic acid). The manner in which the formation of the L.E. cell factor is stimulated is not fully understood. With multiple abnormal antibodies, a disturbance of the antibody-forming tissue has been substantiated with genetic and acquired factors playing a role.

As a result of systemic involvement, approximately 75% of cases will show a normocytic, normochromic anemia secondary to mild-moderate bone marrow depression. In addition, a hemorrhagic diathesis may develop producing an acquired hemolytic anemia. Leukopenia is present in over half of the patients, apparently associated with leuko-agglutinins. "Idiopathic" thrombocytopenic purpura is not uncommonly found in lupus erythematosus and splenectomy may cause an exacerbation of the disease. The evidence of false serologic tests for syphilis has been reported in nearly 50%, depending on the source of the population under examination. This finding is correct prior to the introduction of the Treponema immobilization and Treponema pallidum complement tests, which are not widely used in the detection of syphilis.

Case Report

A.C., white female, widow

Chief Complaint:

Painful sore tongue with a burning sensation making chewing difficult and painful for four months. Ease of fatigue and generalized malaise of six months duration.

Present Illness:

Patient developed a painful lesion on the tongue (**Fig. 6**) and a sore throat several months ago and consulted a physician who treated her with anesthetic troches and penicillin for about three months. She was referred to her dentist for possible irritation to the tongue. Since patient did not respond to prescribed therapy, she was referred to my office. At this time, she was slightly hoarse.

Past History:

Medical: a) Hypertension for the past 12 years.
b) Skin rash on face for the past six-eight months was treated with a cortisone ointment.
c) Arthritis without deformities for the past three years.

Surgical: Hemorrhoidectomy and appendectomy.

Family History:

Patient has three children in good health. Husband is a severe cardiac and alcoholic.

Habits:

Noncontributory.

Physical Examination:

Examination revealed a well developed, acutely ill, feverish, elderly white female who appeared very apprehensive. Temperature was 99.2; pulse 86; blood pressure 130/80.

Skin: Erythematous lesions on face, back of neck and arms. Scaly non-pruritic patches were noted on the ears. The typical "butterfly" pattern across the bridge of the nose and malar eminences was absent. Fingertips showed erythema with some arthritic deformities. The hands disclosed some ulceration on the knuckles (**Fig. 7**). Erythematous lesions on elbows (**Fig. 8**) and knees are more prominent associated with ulcerations having undermined edges.

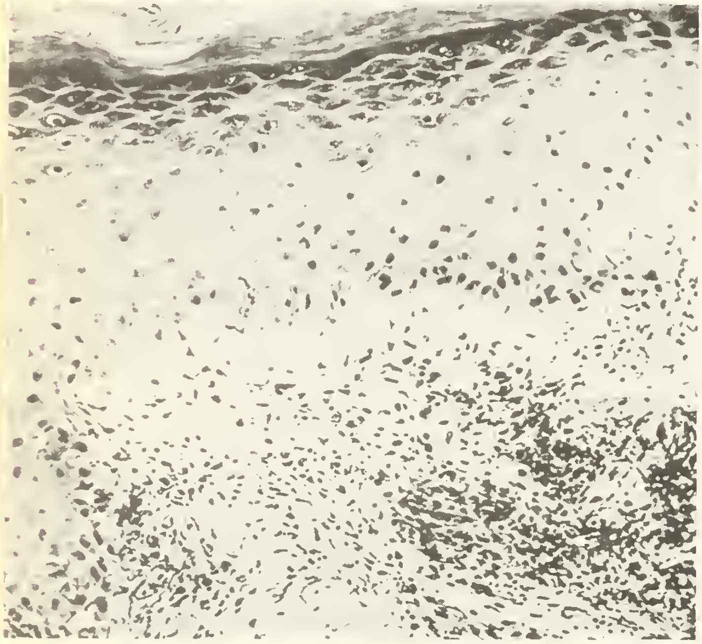
Mouth: Normally shaped lips but both, especially the lower, showed crusted areas (**Fig. 9**). Several upper and lower teeth were missing and not replaced by prosthesis. Normal amount of calculus was present.

Tongue was red and showed a deep ulceration on the left side which was rather painful to pressure (Fig. 6). The left cheek near the commissure revealed an eroded bluish-red lesion (**Fig. 10**).

Clinical Impression:

It was obvious that the oral manifestations were only one facet of a complex systemic condition. The debilitated condition, arthritis, cutaneous and mucous membrane erythematous lesions, fever and the scaly rash on the ears, suggested the diagnosis of Erythema Multiforme, Moniliasis, Lupus Erythematosus (Disseminatus) or Pemphigus.

Fig. 11-A. Cutaneous biopsy showing subepidermal edema with distortion of basal cell layer and marked infiltration of inflammatory cells in underlying connective tissues.



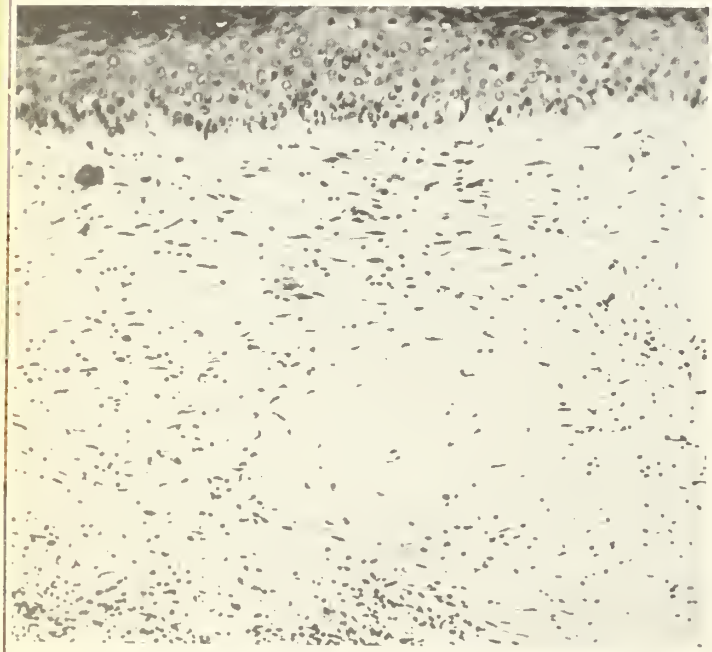


Fig. 11-B. Cutaneous biopsy showing central focal area of liquefaction degeneration of collagen and abundant chronic inflammatory elements in adjacent connective tissues. Note pseudomembrane formation of the basal cell layer of epithelium.

Treatment:

a) Capsules B Complex with Vitamin C, one t.i.d

b) Alkaline mouthwash.

c) Regular diet, free of spicy foods, served at moderate temperatures.

Laboratory Data:

Smear and culture from tongue revealed monilia albicans.

Treatment After Bacteriologic Studies Were Obtained:

a) Capsules B Complex with Vitamin C, one t.i.d

b) Alkaline mouthwash.

c) Regular diet, free of spicy foods, served at moderate temperatures.

d) Oral Mycostatin, two tablets q.i.d.

Patient continued to complain of pain in tongue, chest, and neck muscles. Also, there was no improvement in the cutaneous erythema and oral lesions, and hoarseness became persistent. It was, therefore, decided to admit patient to the hospital for further observation and laboratory tests with recommendation to rule out lupus erythematosus and pemphigus.

Course in Hospital (First Admission):

Patient was examined in consultation by an internist, dermatologist and allergist. No agreement could be reached as to diagnosis. Blood pressure was between 130/80 and 110/80. Temperature ranged between 99-100° F. Pulse was 68-96/minute.

Laboratory Data:

CBC: Hg. 13.7 grams or 91%; RBC 4.50 million; WBC 5,200 with stabs 0, polys 66, lymphs 24 and monos 10.

Skin Biopsy: Chronic nonspecific dermatitis.

Blood Serology: Negative.

Urinalysis: Color: yellow; character: clear; reaction: acid; albumin, sugar and acetone: negative; few epithelial cells and crystals.

Sedimentation Rate: 60 minutes: 56 mm.

Course in Hospital (Second Admission):

Patient was sent home after spending 13 days in the hospital. Twenty-four hours after discharge, she was readmitted since malaise, weakness and dyspnea became worse. The patient was immediately put on I.V. cortisone.

Laboratory Data:

Bone Marrow Biopsy: Revealed typical lupus erythematosus cell formation (Fig. 5).

Skin Biopsy: Compatible with lupus erythematosus (disseminatus).

CBC: Hg. 16.0 grams or 107%; RBC 5.0 million; WBC 6,850 with stabs 1, polys 83, lymphs 13 and monos 3.

Blood Serology: Negative.

Urinalysis: Same as on first admission.

Sedimentation Rate: Same as on first admission.

Surgical Pathology Report:

Gross Pathology: The specimen consisted of an elliptical segment of skin measuring 2.2 x 1.6 x 1.0 cms. One surface was covered by well defined erythematous patch with superficial minute scales. No zones of ulceration were seen. Serial sections of the entire tissue were submitted for microscopic examination.

Microscopic Pathology: Sections consisted of skin showing pronounced histopathological changes **(Fig. 11, A and B)**. The squamous epithelium was intact. The basal cells were undergoing liquefaction necrosis with disorder of arrangement. The rete Malpighii were atrophic in some areas whereas other zones disclosed acanthosis. Hyperkeratosis was a conspicuous finding associated with kerototic plugs in the follicular openings. Parakeratosis was usually absent. The corium revealed marked edema. The capillaries and larger vessels were distended by red blood cells and their walls were edematous. A patchy inflammatory reaction was seen chiefly in the vicinity of hair follicles and sebaceous glands. These cells consisted mainly of lymphocytes; a smaller number of plasma cells and histiocytes were observed. In addition, minute zones of basophilic degeneration of collagen and elastic tissue was apparent in the upper corium.

Final diagnosis: compatible with lupus erythematosus

Course in Hospital:

Although the prognosis for patients with S.L.E. has greatly improved since the advent of steroid therapy, unfortunately this patient did not respond well. She developed severe hypertension with renal involvement followed by acute bronchitis. Severe leukopenia with a white count below 2500/cm ensued, accompanied by Cushing's syndrome and central nervous system involvement. The hospital stay was stormy. The patient suffered a severe abscess of the buttock requiring drainage, and a cellulitis of the right elbow. Neither responded to antibiotics. Patient expired 11 days after last admittance.

Summary and conclusion

1) The case of Systemic Lupus Erythematosus in a female over 60 years of age is reported, although the disease affects chiefly females between the ages of 10-40 years.

2) Discoid and Systemic forms are only different manifestations of the same basic disorder.

3) Both conditions may have oral manifestations except that in the systemic variety, the oral lesions are more pronounced with a greater tendency to bleeding and ulceration.

4) One cannot determine from the clinical or microscopic examination of a discoid-appearing lesion whether or not there is systemic involvement.

5) Finally, the correlation of clinical and laboratory findings are essential in the correct diagnosis of this disease.

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The need for burn care facilities in Michigan

By Irving Feller, MD
Keith H. Crane, MSE
K. E. Richards, MD
George Koepke, MD
Ann Arbor

Documented methods for treating burn injuries date back to the pyramids, but only during the last 25 years has the care of the burned patient been recognized as requiring special medical skills and often special care facilities. The level of interest and activity has increased rapidly in the past two decades, but the number and distribution of specialized care facilities remains woefully inadequate. What follows here is a discussion of the demand for such facilities, the numbers and locations of current facilities, and the type, number, and location of new facilities needed to provide adequate care for severely burned patients throughout the State of Michigan.

Table 1 presents some measurements of the magnitude of the present burn problem in the United States. **Table 2** presents similar statistics for the State of Michigan. Over 100,000 burn accidents occur in Michigan each year, approximately 3,200 patients are hospitalized, and about 400 die from these injuries. The 385,000 days of disability and the $13 million in medical costs show the scope of the problem in Michigan.

In spite of increased recognition of the lack of sufficient facilities, progress toward improvement is painfully slow. At present, less than 100 of the 6,000 general hospitals in the United States provide specialized burn care,[1] and only five of the 200 hospitals in Michigan provide such care. **Figure 1** shows existing facilities and programs located in Michigan.

Table 1

The Burn Problem in the United States[1]

	Data of Burn Injuries Per Year
A. Incidence	2,200,000
B. Mortality	9,000
C. Hospital Admissions	74,000[2]
D. Disability Days	8,900,000
1. In Hospital	1,300,000
2. In Bed (not hospital)	2,000,000
3. In Restricted Activity	5,600,000
E. Hospital and/or Medical Costs	$300,000,000

1. Compiled using data from the U.S. Public Health Service, the Commission on Professional and Hospital Activities-Ann Arbor, and the National Burn Information Exchange-Ann Arbor.
2. 70,000 burns of the skin; 4,000 eye and internal burns.

Table 2

The Burn Problem in Michigan*

	Number of Burn Injuries Per Year
A. Incidence	100,000
B. Mortality	400
C. Hospital Admissions	3,200
D. Disability Days	385,000
1. In Hospital	56,000
2. In Bed (not hospital)	87,000
3. In Restricted Activity	242,000
E. Hospital and/or Medical Costs	$13,000,000

*Approximately 4.3% of the United States totals.

The slow rate of progress cannot be blamed entirely on the hospitals and their administrations. A special hospital facility is of little value without the adequately skilled medical personnel to use it, and the medical schools are ultimately responsible for supplying these skilled personnel. Only 41 of the 92 medical schools in the U.S.A. are presently affiliated with hospitals offering any specialized burn care, and only nine of these have burn centers for teaching and research as well as for patient care. The net effect of today's shortage of medical skills and facilities for burn treatment is that approximately 90% of all burn patients do not receive the quality of care they need. The problem is a lack of appreciation for the specialized care required by the burned patient.

All patients with burns serious enough to require hospitalization require some level of special-

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Doctor Feller is clinical associate professor of surgery, and director of the University of Michigan Burn Center, where Mr. Crane is a research assistant.

Doctor Richards is a clinical instructor and Doctor Koepke is professor of physical medicine and rehabilitation at the U-M Medical Center.

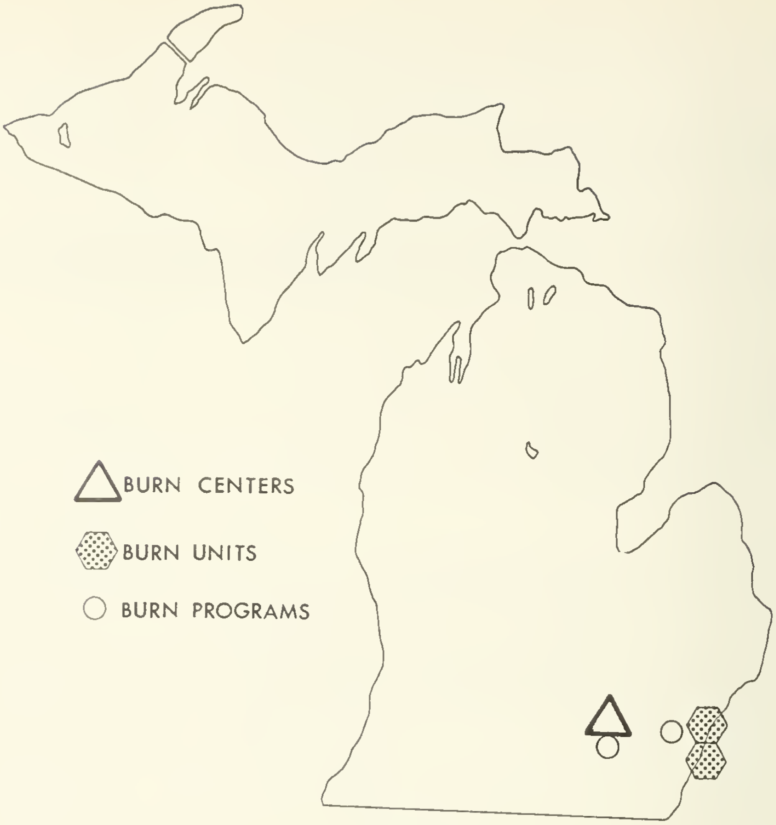

Figure 1
Existing Burn Care Facilities in Michigan

ized treatment. All burn victims have lost some of the protective and regulatory functions of their skin and are thereby susceptible to infections, fluid loss, metabolic disorders, and other complications. A considerable amount of time and attention is required to prevent or contain these complications. The average length of hospitalization for patients with skin burns is about 18 days, which is 80% higher than the average length of hospitalization for patients with all types of injuries.

The primary purpose of the burn treatment facility is to provide the resources required for care of the burn accident victims. However, all burns are not alike and therefore the facilities required for their treatment are not alike. Current specialized burn care facilities are now classified as follows: (1) burn centers; (2) burn units; and (3) burn programs. These are defined as follows:

Burn Program: At this level, the hospital has no specialized facilities or areas for burn care. However, a consistent plan for management of burn patients is implemented by an interested and experienced physician (or jointly by several physicians). As a measure of experience, it is assumed that the physician is treating at least 25 burns per year.

Burn Unit: This denotes a burn program being conducted in a *specialized facility* which is used only for burns. It is assumed that this facility has at least four beds and that at least 35 burn patients per year are treated there. A limited amount of research and teaching may be present on an intermittent basis.

Burn Center: This denotes a larger burn unit, with a special emphasis on research and teaching as well as patient care. The facility provides very intensive burn-patient care which requires the support of the research and teaching staffs. In turn, the intensive care environment provides the ideal "classroom" for teaching the complexities of burn care, and also serves as a "laboratory" for research into the many uncertainties of present-day burn treatment. It is assumed that the facility has at least six beds, and that at least 50 patients with burns are treated there per year.

The major factors considered in judging the relative severity of a burn injury, and hence the level of burn care required, are as follows:

1) The age of the patient.

2) The total size (area) of the burn (including full-thickness and partial-thickness skin loss) measured as a percent of total body surface.

National Burn Information Exchange
MORTALITY ANALYSIS:
% Survival vs. Age and Total Area Burned

% Burn	AGE 0-1	2-4	5-34	35-49	50-59	60-74	75-100	Total
0-9	100	100	100	99	97	95	80	99
10-19	99	99	100	98	96	78	61	97
20-29	91	95	98	94	84	54	44	92
30-39	75	82	91	77	58	23	0	79
40-49	54	67	83	60	38	13	0	68
50-59	20	44	66	47	27	11	0	50
60-69	6	22	49	32	19	8	0	35
70-79	20	25	23	8	25	0	0	18
80-89	0	5	14	8	6	0	0	9
90-100	0	9	3	0	0	0	0	2
Total	91	89	88	79	71	54	38	83

August, 1971

3) The depth of the burn, i.e., the area of full-thickness skin loss (third-degree burn) measured as a percent of total body surface.

4) The location (s) of the burn on the body.

5) The past medical history of the patient.

6) The presence of other injuries in addition to the burn.

Of these factors, the first three are the most important. Also, since the size of burn and depth of burn are often correlated, the knowledge of just the patient's age and total area burned can often yield an accurate prognosis. **Table 3** demonstrates the relationship of survival to age and total area burned for a sample of over 10,000 patients (as reported by participants of the National Burn Information Exchange^2). Considerations of this and other severity-factor data led to the establishment of general criteria for determining the kind of facility that would be adequate for a burned patient. These criteria are summarized in **Table 4.** Note that the factor of full-thickness burn is not included, because it cannot be determined accurately until later in the treatment process.

Approximately 3,200 patients with burn injuries are admitted, to Michigan hospitals each year. Using the criteria from **Table 4,** admissions can be divided into three categories: (1) "Severe" skin-burn patients—i.e., those who require treatment in a burn unit or burn center; (2) "Moderate" skin-burn patients—i.e., those who require treatment in a hospital with a burn program; and (3) Eye or internal burn injuries.

It is estimated that there are 600 severe and 2,400 moderate burn patients treated in Michigan each year. Burn centers and burn units are not expected to refuse admission to moderate burns from their local community. However, it is assumed that non-specialized-care institutions will refer moderate burns to the nearest burn program, and also that burn programs (as well as non-specialized-care institutions) will refer severe burns to the nearest burn unit or burn center. An ideal referral plan may never be completely implemented. However, the experience of the Univer-

Table 4
Recommendations for Burn Care Facility Triage Determined by Severity of Burn

Area Burned and Other Severity Factors

Age	1-19%	20-100%	With Severity Factors A, B, or C 1-19%	20-100%
0-59 yrs.	☐	▒	▒	▥
60+ yrs.	▒	▒	▥	▥

☐ = BURN PROGRAM

▒ = BURN CENTER OR BURN UNIT

▥ = BURN CENTER

A. Part of Body Burned: A burn of the perineal area or a combination burn of the face, neck, and chest.

B. Past Medical History: A past medical history affecting present health (e.g., diabetes, heart disease, etc.)

C. Concurrent Injury: An injury in addition to the burn (e.g., skull, fracture, severe abdominal injury, etc.)

Table 5

Proposed Distribution of Burn Centers and/or Burn Units in Michigan

Metropolitan Area	Burn Center or Burn Unit Average Daily Census*	Number of Beds Needed at 90% Occupancy	Total Burn Centers and Burn Units Proposed**	
			Centers	Units
Detroit and Pontiac	34	38	1	2
Ann Arbor	17	19	1	1
Grand Rapids	8	9	0	1
Kalamazoo	6	7	0	1
Saginaw	6	7	0	1
Flint	5	6	0	1
Lansing	5	6	1	0
Sault Ste. Marie	4	5	0	1
Total	85	97	3	8

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*Distributed proportionately to areas based upon 1970 population, except for Ann Arbor where true patient census figures were used.

**Based upon a minimum size of 4 beds and a maximum size of 15 beds.

sity of Michigan Burn Center is that such a referral pattern can develop over a period of about five years, even without official encouragement, once the proper facility is established and available.

The data indicates that there is a need for beds in the Michigan hospitals to accommodate the 3,000 patients. If the "burn unit or burn center" census was distributed proportionately to the metropolitan areas in the state which could reasonably support such facilities (based upon 1970 census figures), Michigan would require a mix of 11 burn units and centers, with a total capacity of 97 beds to accommodate the 1,200 who require this type of facility each year. This is based on an estimated occupancy rate of 90%, a minimum practical facility size of four beds, and a maximum facility size of 15 beds. These figures are presented in **Table 5.**

In a similar fashion, the 1,800 patients who would make up the "burn program" census were distributed to the 18 largest population areas. If each burn program had an average daily census of one to three patients, this would mean that 25-75 patients per year would be treated at each of these hospitals. On the basis of this estimate, Michigan would require 31 burn programs to meet present needs. These figures are presented in **Table 6.**

Figure 2 shows a proposed geographic distribution of three burn centers, eight burn units, and 31 burn programs consistent with the information presented in **Tables 5 and 6.** No precise basis was established for delineation and location of burn

Table 6

Proposed Distribution of Burn Programs in Michigan

Metropolitan Area	Burn Program Average Daily Census*	Total Burn Programs Proposed**
Detroit and Pontiac	35	12
Grand Rapids	6	2
Flint	5	2
Lansing	4	2
Kalamazoo	3	1
Saginaw	3	1
Ann Arbor	3	0
Marquette	2	1
Muskegon	2	1
Jackson	2	1
Benton Harbor	2	1
Battle Creek	2	1
Bay City	1	1
Midland	1	1
Petoskey	1	1
Traverse City	1	1
Port Huron	1	1
Monroe	1	1
Total	75	31

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*Distributed proportionately to areas based upon 1970 population except for Ann Arbor where true census figures were used.

**Based upon an average daily census of 1-3 patients.

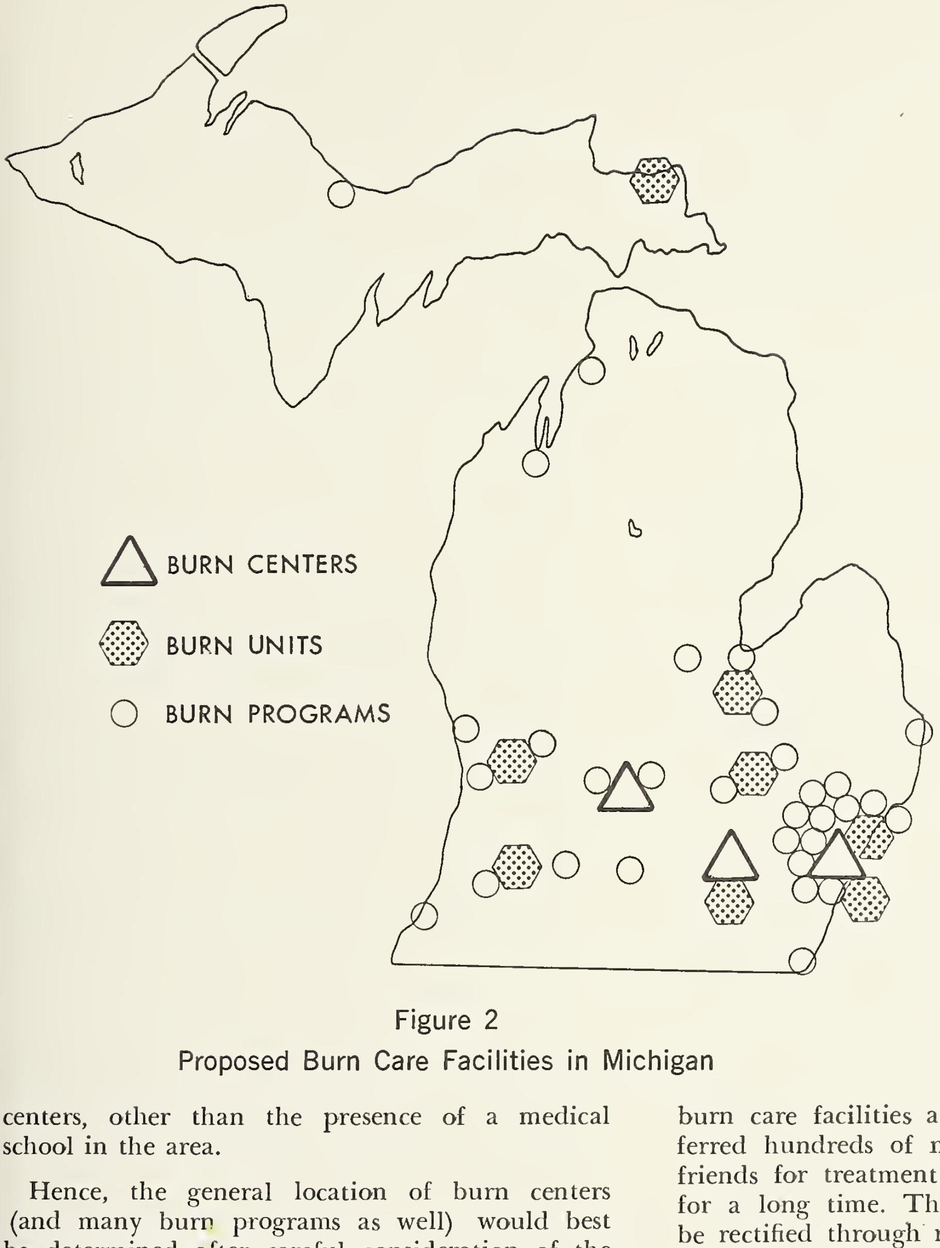

Figure 2
Proposed Burn Care Facilities in Michigan

centers, other than the presence of a medical school in the area.

Hence, the general location of burn centers (and many burn programs as well) would best be determined after careful consideration of the availability of qualified doctors, paramedical personnel, and supportive facilities in each area. The specific location (i.e., "parent" hospital) of every burn center, unit, and program must take into account these same factors at the specific hospital.

Comparing **Figure 1** (present burn care facilities) with **Figure 2** (proposed burn care facilities) leaves little doubt that Michigan does not yet have the facilities to provide adequate treatment to burned patients. Where 11 burn centers and burn units are needed, only three exist; and where 31 burn programs are needed, only two exist. Furthermore, the distribution of these limited facilities is not ideal.

Burn patients who should be treated in local burn care facilities are, in many cases, being referred hundreds of miles from their family and friends for treatment that often turns out to be for a long time. This situation must ultimately be rectified through regional and state-wide planning of burn care facilities. In addition to facility planning, a reporting system should also be instituted to monitor the performance of new facilities. The National Burn Information Exchange[2] represents a system that could be very useful on a state-wide basis to ensure that new facilities are operating effectively.

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Perinatal Tips

By Paul M. Zavell, MD
Detroit

The following case from the files of the Wayne County Medical Society Perinatal Mortality Committee is presented as an aid in continuing education.

Maternal

This was the seventh pregnancy of this 40-year-old O+ white mother.

Her first three pregnancies were uneventful with three living children. Her fourth pregnancy ended in a spontaneous abortion at about five months. Following this she developed hypertension that persisted. Her blood pressure ranged systolic 140-160 and diastolic 80-100.

Her fifth pregnancy resulted in twin premature infants, both of which survived and are alive and apparently normal. Her sixth pregnancy was stormy with pre-eclampsia and resulting in a stillbirth at 39 weeks.

During this pregnancy, her seventh, she had blood pressure ranges recorded at prenatal visits of systolic 180-200 and diastolic 90-110. She is five feet six inches and gained thirty pounds during the pregnancy (140—170#). She had been on Hygrotin 100 mgm daily, a low salt diet and limited activity.

Because of her elevated blood pressure and development of +1 pedal edema she was hospitalized at 38 weeks gestation. After careful observation and several consultations, it was decided to do a C-Section and this was done (Transverse Low) by the 39th week. Her blood pressure while in the hospital ranged 166-182 systolic with 88-98 diastolic.

Fetal

A seven pound, two ounce white, male infant was delivered with apgar of seven at one minute and nine at five minutes. (He exhibited lethargy, was dusky with respiratory retractions almost clearing completely; he was given oxygen and mist in incubator.) Cord blood was 0. Soon after arrival in the nursery, the infant again seemed to get progressively worse with return of duskiness and respiratory distress. Blood studies were quickly drawn and reported as

1) PCO_2 = 66 mm Hg (34-45)
   PO_2 = 15 mm Hg (75-100)
   PH = 7.0 (7.35-7.45)
2) CBC with Hgb of 10.4 gm, Hct = 38, Rbc = $3.48x10^6$, WBC = 10,970, PMN = 26, Bd = 15, Lymph = 58, Eos = 01 with 21/100 WBC of Normoblasts.

No treatment was initiated except oxygen and mist.

Six hours after birth repeat blood studies were drawn and reported back one hour later as Ph = 7.2, PCO_2 = 78, PO_2 = 30. The hemoglobin was reported as 10.6 gm. A chest X-ray showed cardiac enlargement, cause undetermined. At this time, the infant was started on I.V. Fluid of 10% G/W with added Sodium Bicarbonate.

By 10 hours of life, it was deemed wise to give the infant blood and 60 cc of packed cells were given. Also, at this time, antibiotics were started with 150,000 U of aq Penicillin I.V. and 15 mgm I.M. of Kanamycin both q12 hours.

Despite all this, the infant progressively deteriorated and expired at 18 hours of age. The final clinical impression was "probable sepsis and possible congenital heart disease with secondary respiratory distress."

An autopsy was done showing massive aspiration of amniotic fluid, hyaline membrane disease and anoxic subdural and subarachnoid hemorrhage.

Perinatal committee comments

1. Although it may be argued that with a hemoglobulin of 10 to 10.6 gm a transfusion was not really necessary, it is recognized that the buffering effect and oxygen transportation capabilities of this blood can be very important to an infant in such a hazardous condition.

2. If packed cells are given it is recommended that these be limited to 5 cc/# rather than 8 - 9 cc/# as given here.

3. Any infant with CNS, respiratory or unusual signs and symptoms (poor feeding, lethargy, vomiting) should be considered as a possible hypoglyemic candidate. Blood glucose should be done at least once.

4. Where respiratory distress symptoms are present, early use of I.V. fluids with sodium bicarbonate following the Usher method should be considered.

5. Where anemia is present and unexplained, examination of the maternal blood for fetal hemoglobin to rule out fetal to maternal hemorrhage is a worthwhile procedure.

Doctor Zavell is chairman, Neo-Natal and Hospital Care Committee, Michigan Chapter, A.A.P., and chairman, Perinatal Mortality Study Committee, Wayne County Medical Society.

The Stokes-Adams syndrome:

Mechanisms and treatment

By Robert A. O'Rourke, MD
San Diego

During the past few years markedly improved cardiac monitoring has more precisely elucidated the underlying electrocardiographic mechanisms producing Stokes-Adams syncope. Moreover, the rapid advances in electrical pacemakers have contributed significantly to the prevention and treatment of arrhythmia-induced syncope.

Electrocardiographic mechanisms

At one time ventricular standstill was thought to be the sole mechanism responsible for Stokes-Adams syncope and it is still considered the most frequent underlying rhythm disturbance. However, it is now established that Stokes-Adams attacks may also be due to extreme bradycardia or to a variety of tachyarrhythmias, particularly ventricular tachycardia and ventricular fibrillation. Continuous monitoring has demonstrated that several electrocardiographic mechanisms may produce syncope in the same patient.

(Second in a two-part series)

The arrhythmias responsible for Stokes-Adams syncope may be divided into seven groups:

1. **Sudden interruption of atrioventricular impulse transmission causing transient asystole.** When the cardiac rhythm changes from a sinus mechanism or incomplete A-V block to complete heart block, a period of asystole often occurs before the junctional or ventricular pacemaker assumes rhythmicity at its inherent rate. This "warm-up period" varies from ten to ninety seconds and is termed the "preautomatic pause."
2. **Atrial standstill with failure of the junctional pacemaker resulting in ventricular asystole.** When sinoatrial node impulse formation ceases and the A-V junctional tissue fails to assume rhythmicity, ventricular asystole results. This mechanism for Stokes-Adams syncope may occur in patients with inferior wall myocardial ischemia and may be influenced by vagal hyperactivity. This is an uncommon mechanism of arrhythmia-induced syncope.
3. **Asystole in the presence of established heart block.** This arrhythmia may result from a shift in the pacemaker below the area of non-conduction to still a lower focus resulting in a period of asystole resembling the "preautomatic pause."
4. **Paroxysmal ventricular tachycardia or fibrillation in the presence of complete heart block.** A slow heart rate during complete heart block predisposes to rapid impulse formation from ectopic foci. Either ventricular tachycardia or fibrillation may then ensue with syncope resulting.
5. **Paroxysmal ventricular tachycardia or fibrillation during normal A-V conduction.** These arrhythmias are most frequently observed in patients with acute myocardial infarction but have also caused syncopal episodes in patients with apparently normal hearts.
6. **Supraventricular arrhythmias.** Supraventricular tachycardias and bradycardias associated with syncopal episodes have been demonstrated by continuous electrocardiographic monitoring in many patients with the Stokes-Adams syndrome. Frequently the sinus bradycardia predisposes to episodic supraventricular tachycardia ("bradycardia-tachycardia

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Doctor O'Rourke is with the Department of Medicine of the University of California at San Diego. His paper is one in a series on clinical cardiology prepared by the American Heart Association and made available to **Michigan Medicine** by the Michigan Heart Association.

syndrome"). In patients with coronary artery disease tachycardia increases myocardial oxygen demands and decreases left coronary artery diastolic blood flow, often decreasing cardiac output despite the increase in heart rate. Syncopal episodes may result.

Sinus bradycardia, sinoatrial and sinoatrial arrest may cause syncope in patients with heart disease who are unable to increase stroke volume sufficiently to maintain adequate cerebral blood flow.

7. **Combined forms.** Uncommonly, paroxysmal tachyarrhythmias may be followed by a period of asystole due to a delay in automaticity of pacemakers which have been suppressed during the tachycardia.

The recognition that different electrocardiographic mechanisms may produce syncope in the same patient on different occasions is important in therapy.

Treatment

The aim of therapy for arrhythmia-induced syncope is threefold: (1) prompt restoration of the circulation during cardiac arrest, (2) restoration of an intrinsic cardiac rhythm adequate to maintain cerebral blood flow and (3) prevention of recurrent episodes.

Medical Treatment. The medical therapy of complete heart block includes the correction of potential contributing factors such as acidosis and hyperkalemia. The sympathomimetic drugs, which include parenteral epinephrine, oral ephedrine and isoproterenol by either route of administration, are primarily indicated when ventricular asystole or bradycardia occurs in complete heart block and intracardiac pacing is unavailable. These agents act by increasing A-V conduction, increasing the rate of the ventricular pacemaker, and shifting the lower pacemaker to a higher focus in the common bundle or A-V junctional tissue. During an attack of arrhythmia-induced syncope due to bradycardia, isoproterenol should be given by intravenous infusion during ECG monitoring so that its administration can be rapidly terminated if ventricular irritability results.

The vagalytic agent atropine may increase the ventricular rate in complete heart block complicating a recent inferior wall myocardial infarction. Atropine is often successful in the treatment and prevention of Stokes-Adams syncope due to sinus bradycardia, sinoatrial block and bradycardia-tachycardia syndrome.

Steroids through their anti-inflammatory and hypokalemic effects have been occasionally successful in improving A-V conduction in patients with complete heart block due to myocarditis or acute myocardial infarction.

The trisodium salt of EDTA (ethylenediamine tetra-acetic acid), a calcium chelating agent, has been used in the treatment of complete heart block due to digitalis intoxication when electrical pacing is unavailable.

Pacemaker therapy. Because of the unpredictable, potentially fatal nature of Stokes-Adams attacks and the inconsistent results and frequent complications with drug therapy, electrical pacing has become the treatment of choice when syncope occurs in patients with complete heart block.

The general indications for pacemaker insertion include (1) complete heart block associated with congestive heart failure (2) complete heart block with Stokes-Adams syncope (3) complete heart block following acute anterior or interior wall myocardial infarction (4) partial A-V block (second degree block) complicating anterior wall myocardial infarction and (5) post surgical complete heart block.

Recent reports have demonstrated the feasibility of suppressing episodes of ventricular tachycardia and fibrillation in patients with normal A-V conduction by pacing the atrium or the ventricle at a rate faster than that present between episodes of ventricular tachyarrhythmia. Electrical pacing has been employed successfully in combination with propranolol and cardiac sympathectomy in the treatment of otherwise unresponsive ventricular arrhythmias. Rapid atrial pacing has been used successfully in the treatment of supraventricular tachycardias including atrial flutter and paroxysmal atrial tachycardia.

In patients with syncopal attacks due to ventricular tachycardia or ventricular fibrillation complicating complete heart block, the emergency insertion of a ventricular pacemaker is strongly indicated. A ventricular pacemaker is the only means available for the long-term prevention of ventricular tachyarrhythmias in patients with heart block. If transient ventricular asystole complicates complete heart block a ventricular pacemaker is also indicated. A single Stokes-Adams attack in a patient with complete heart block is sufficient reason for pacemaker insertion.

Suicides: Does our society care?

By John Halick, MD
Greenville

Suicide is a pervasive problem in our country. A bulletin issued by the National Institutes of Mental Health predicts that during the decade of the seventies, at least 26,000 Americans annually will be certified as suicides; at least half again as many will die unrecognized self-destructive deaths, and more than three million . . . will make serious enough suicide attempts to require some medical intervention."[1]

Despite the vast hidden reservoir of suicide in current statistics of death by such means as alcohol, drugs, and highway accident, several factors dull the public consciousness toward this cause of death.

First is the reluctance to face the unique circumstances of this form of death, either personally or collectively.

Secondly—and most important to physicians—a body of comprehensive and documented statistics simply does not exist. No single organization, at either county or state level, maintains a comprehensive bank of information on suicide and suicide attempts.

1969 statistics for the state reveal 978 actual suicides. Wayne County, the most populous in Michigan, reported 304. However, Bruce Danto, MD, director of the Suicide Prevention Center in Detroit, indicated in private correspondence that a truer estimate would be three to five times greater!

Major need— to centralize prevention efforts

How can we begin to cope with this massive hidden problem? The major need is through state legislative action and effort. Because of the complex factors involved, all health services—public health, mental health, and aspects of public education—should be united in a Department of Comprehensive Health Services. Action at the county level, because of financial and personnel limitations, is not feasible. State and federal help is needed.

At the present stage, the legislature should appoint a suicide study committee from all disciplines and geographic areas, including all races and creeds. The objective would be to establish an inter-disciplinary program, under a well-coordinated statewide agency that can attack the problem of suicide.

Help can be given in various fields

Suicide, more than any other phenomenon, requires a truly "gestalt" approach. But the current primitive psycho-social and medical criteria for evaluating, and preventing, death by suicide requires urgent re-evaluation.

Assistance could be given in several areas:

Medical. Currently, taxonomic classification is based on anatomic, physiologic, psychological, and pathological terminology. Fundamental changes in the keeping of medical records must occur. Sociological and economic terminology must be introduced in a sophisticated manner, for progress in recognizing and controlling the suicide rate.

It would seem appropriate if the Mental Health Department of the State of Michigan would enforce a comprehensive taxonomic nomenclature. Data could then be retrieved on all issues involving mental health.

Suicide hospitalization centers should also be established throughout the state. Such hospitals, designated as suicide therapeutic centers, should include all necessary medical disciplines and intensive care facilities.

Public Education. The Department of Public Instruction should make provision for immediate referral of any student who manifests suicidal ideation (masked, latent or overt).

Doctor Halick is in private practice in Greenville and is a founding member of the Montcalm County Mental Health Board.

Since suicide is the fourth or fifth leading cause of death for 15- to 35-year olds, teachers should be educated to detect suicidal tendencies. Most threatened suicides are ambivalent toward death, and wish to be rescued.

Public education programs should also be set up to detail suicide prevention services, such as a telephone answering center. It has been estimated than 50 to 70 percent of those who eventually kill themselves communicate their intent in advance.[2] Thus, the need for a statewide network of answering services is obvious as part of an effective prevention program.

Religion. Active organized participation of the clergy is a cornerstone of an overall program. Each church should set aside periods of time for individual counsel for parishioners who face emotional crises with suicidal possibilities.

Society must face the suicide problem

As a practicing physician I emphatically believe that the current recognized incidence of suicide can be multiplied by a factor of at least seven. The State of Michigan spends large sums of tax money in the control of diseases which are now rare. The incidence of death by smallpox, diphtheria, polio, lockjaw, and syphilis is virtually nonexistent. In marked contrast, the incidence of mortality by suicide is enormous. It is especially noteworthy that the second cause of death among college students is suicide.

A critical need is new legislation which will require the reporting of actual, attempted and threatened suicide to a central agency, such as the department of mental health. Michigan has always been in the vanguard of public health developments, and hopefully the legislature will rise to the challenge for new laws in this area.

The existential writer Albert Camus stated that "There is but one truly serious philosophical problem, and that is suicide. Judging whether life is or is not worth living amounts to answering the fundamental question of philosophy. All the rest . . . comes afterwards."[3]

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MICHIGAN
DEPARTMENT
OF PUBLIC
HEALTH

Monthly Surveillance Report

Cases of Certain Diseases Reported
To the Michigan Department of Public Health

For The Four-Week Period Ending February 25, 1972

	1972 This 4-Week Period	1971 Same 4-Week Period	1972 Total To Above Date	1971 Total Same Date	Total Cases for 1971
Rubella	132	276	236	432	2,955
Congenital Rubella Syndrome	0	0	0	0	1
Measles	164	76	328	129	2,659
Whooping Cough	8	11	21	16*	140*
Diphtheria	0	0	0	0	1
Mumps	349	1,309	693	2,399	10,748
Scarlet Fever & Strep Sore Throat	1,447	1,440	2,539	2,689	11,244
Tetanus	0	0	0	0	7
Poliomyelitis (paralytic)	0	0	0	0	0
Hepatitis	348	419	770	811	4,828
Salmonellosis (other than S. typhi)	43	47	107	102	691
Typhoid Fever (S. typhi)	1	1	1	1	10
Shigellosis	46	11	94	39	295
Aseptic Meningitis	3	10	9	20	239
Encephalitis	8	14	16	24	108
Meningococcic Meningitis	4	7	9	11	64
H. Influenza Meningitis	4	5	9	14	82
Tuberculosis	132	141	244	244	1,824
Syphilis	447	285	812	633	4,689
Gonorrhea	1,728	1,359	3,242	2,991	22,115

Information can be supplied by the local health department on the local incidence of disease.

Maurice Reizen, M.D., Director
Michigan Department of Public Health

*corrected totals

Attitudes toward abortion law reform at The University of Michigan Medical Center

By Durlin Hickok, AB
Colin Campbell, MD
Ann Arbor

Abortion law reform has been a matter of concern in the United States for several years, and a number of states have enacted new laws which generally permit abortion to be obtained more readily than it had been previously.

In the spring of 1970 no less than eight different abortion bills were under consideration by the Senate of the State of Michigan. Because members of the health professions will have a major role in the actual carrying out of the provisions of any new law or laws, we undertook to determine the attitudes at that time towards abortion law reform of students in the Schools of Nursing, Medicine and Public Health, and of the faculty and house staff of the clinical departments of the University of Michigan Medical Center.

Materials and methods:

A questionnaire was sent to all of the students registered in the second term of the 1969-70 school year in the Schools of Nursing, Medicine and Public Health. Another questionnaire differing from the first only in that it was color-coded by specialty and that faculty members were not asked to give their ages, was sent to house staff and faculty of the clinical departments of the University of Michigan Medical Center. The questionnaire is reproduced below. **(FIG. I)**

The intra-university mail service was used to deliver the questionnaires which were sent in large brown envelopes. A preaddressed return envelope was enclosed in the original mailing. In order not to prejudice responses, the return address given for questionnaires sent to students and faculty was, Medical Student Council Committee on Abortion, Medical Science Building. In hopes of obtaining a better response from house staff the junior author's name and office address were on the return envelope.

The first two options given were intended to elicit the polar views on abortion laws. Option number three, while placing no specific restrictions on who might have an abortion, puts the subject in the medical realm and provides for confidentiality.

Option number four refers to the present Michigan abortion law which provides that abortion may be performed only when it is necessary to save the life of the mother. The wording is such that the burden of proof that abortion is necessary rests on the physician.

Option number five is intended to provide for the opinion that the present Michigan law is a good one, except for the burden placed on the physician to prove that what he did was necessary.

Options six, seven, eight and nine are all proposals for abortion laws which have been considered in Michigan.

The two "conscience clauses" have been added as amendments to some of the proposed bills.

The returns were tabulated on punch cards and analyzed by computer. The results were categorized according to the intent of the responses. A positive response to item one indicates a wish to prohibit abortions altogether. Positive responses of items four and five indicate a conservative position on abortion law. Positive responses to any combination of items six, seven and eight are indicative of some wish for change, but short of removing all restrictions. Positive responses to items two, three and nine in effect would approve abortion with virtually no restrictions.

Results

1030 of 2630 questionnaires were returned entirely completed and without any incompatibility between choices.

A few more were returned either incompletely

Mr. Hickok is a medical student, and Doctor Campbell is with the Department of Obstetrics and Gynecology at the University of Michigan.

Figure I

The Michigan Criminal Code on abortion now forbids abortion except to preserve a pregnant woman's life, with burden of that proof being placed on the physician. A number of proposals for changing Michigan's current Criminal Code are now under consideration by the legislature.

Please make X's in the boxes next to any of the statements below which represent how you feel about the regulation of abortion in medical practice in Michigan. Treat each item separately and answer as many as you wish.

1. ☐ Abortion should be considered illegal under all circumstances.
2. ☐ There should be no laws at all governing who may perform an abortion or where it may be performed.
3. ☐ The question of whether or not to perform an abortion shall be a matter of concern solely between the physician and his patient and shall be subject to all the privileges of confidentiality as are other matters between a physician and his patient.
4. ☐ I favor no change in the current laws.
5. ☐ I favor the current laws, without burden of proof being placed on the physician.
6. ☐ An abortion may be performed if there is significant risk that the continuation of the pregnancy would seriously impair the physical health of the mother.
7. ☐ An abortion may be performed if there is significant risk that the continuation of the pregnancy would seriously impair the mental health of the mother.
8. ☐ An abortion may be performed where a pregnancy results from rape or incest.
9. ☐ An illegal abortion shall be defined by law as any abortion not performed at an approved location by a licensed physician.

The following two "conscience clauses" have been a topic of discussion in the state hearings this year. Place an X in the box(es) that you favor.

☐ No physician or hospital or member of a hospital staff shall be compelled by any provision of law to participate in the termination of a pregnancy if they do not wish to do so.

☐ No abortion shall be performed without written consent of the woman.

Please complete the following: Age _____ Sex M_____ F_____

Please place this in the enclosed envelope and return by university mail.

Medical School Council
Committee on Abortion

filled out or with incompatible choices. The total return was 39%. The lowest return was from the medical students, 142 of 824 (17%). The low response rate from medical students does not represent lack of interest in the issues involved, because similar responses are obtained from other such mailings. At least 2/3 of all 3rd and 4th year students are on clerkships out of Ann Arbor and do not visit their medical school mail boxes regularly. The greatest return was from the Public Health students, 127 of 200 (63%).

The over-all responses were as follows:

862 (83.6%) favored abortion virtually without restriction, 121 (11.7%) favored some degree of liberalization, 37 (3.6%) were content with the present Michigan law and 10 (1%) preferred that abortion be prohibited completely. **(TABLE I)**

Chi square analysis of these data does not indicate any significent difference between the groups. The same sort of analysis was conducted by sex and once again no significant difference occurred.

Because of the color-coding of the questionnaire it was possible to look at the responses from the physicians by area of specialization. Responses were analyzed in four sub-groups, medicine and medical specialties, surgery and surgical specialties, obstetrics-gynecology, and psychiatry. **(TABLE II)**

No significant differences were found among house staff regardless of field, although it is interesting that 17 of 19 obstetric-gynecology residents were in favor of abandoning virtually all restrictions on abortion, and the other two wanted some liberalization of the present law.

The differences between faculty members was greater, and did reach significant levels. All 12 members of the obstetric-gynecology faculty preferred removing restrictions on performing abortion. Psychiatrists joined the obstetricians in being more likely to favor abandonment of restrictions than surgeons or physicians.

Both conscience clauses were favored by a large margin, the first 952 to 115 and the second 883 to 184. The first conscience clause is designed to protect physicians, hospital staff and hospitals from being required to participate in abortion. There were significant differences between the groups in regard to this clause. Faculty members and Public Health students were less inclined to favor the clause than were house staff and other students. The second conscience clause provides protection for women from being compelled to have an abortion. Differences here were not significant, but nurses were a little more likely to favor and public health students a little less likely to favor this clause.

Summary and conclusions

(1) Results of a questionnaire survey on abortion law reform at the University of Michigan

Table I

Over-All Responses to Questionnaire

RESPONDENTS	REMOVE RESTRICTIONS	LESS RESTRICTIVE	NO CHANGE	MORE RESTRICTIVE
Medical Students	129	9	3	1
Nursing Students	238	32	12	0
Faculty	147	27	5	4
House Staff	239	41	13	3
Public Health Students	109	12	4	2
TOTAL 1030	862	121	37	10

Table II

Responses of Physicians by Specialty

	REMOVE RESTRICTIONS	LESS RESTRICTIVE	NO CHANGE	MORE RESTRICTIVE
HOUSE STAFF				
Obstetrics-gynecology	17	2	0	0
Psychiatrists	28	3	1	0
Medical	124	23	7	1
Surgical	70	13	5	1
TOTAL 295	239	41	13	2
FACULTY				
Obstetrics-gynecology	12	0	0	0
Psychiatrists	28	2	0	0
Medical	66	14	7	3
Surgical	41	11	1	1
TOTAL 186	147	27	8	4

Medical Center indicate that 83.6% of nursing, medical and public health students, house staff and faculty of clinical departments responding favored removal of virtually all restrictions on the performing of abortion. Less than 5% of those responding favored retaining the present Michigan law or adopting a more conservative approach. The remaining 12% opted for some liberalization short of nearly unrestricted availability of abortion.

(2) No significant differences in attitude towards abortion law were detected by age, sex or level of training.

(3) Psychiatrists and obstetrician-gynecologists were more likely than surgeons and internists to favor elimination of nearly all restrictions on the performance of abortion ($p<.05$).

(4) The two "conscience clauses" which are designed to protect physicians and hospitals on the one hand, and women on the other, were heavily endorsed, 89% for the first, and 83% for the second.

Abortion law reform committee files 218,000 signatures

The Michigan Coordinating Committee for Abortion Law Reform has virtually assured that the matter will be on the November ballot.

On March 1 the committee submitted 218,000 signatures to the secretary of state's office, making Michigan only the second state to go the petition route to consider abortion law reform.

The committee, headed by Jack Stack, MD, Alma, hoped the initiatory legislation, which would permit abortions for any reason within the first 20 weeks of pregnancy, would be submitted to the legislature by the first of April.

The legislature would then have 40 session days to consider the bill. If they have not then passed the bill (which its backers anticipate), it will go on the November ballot.

Your opinion please

MSMS asked the question:

"In the spring of 1971, the Michigan legislature passed a resolution encouraging all Michigan medical schools to establish departments of family medicine. So far, none of the medical schools has such a department. Do you believe there is a need to establish family practice departments? What more can be done to foster their creation?"

These doctors replied:

Joseph V. Fisher, MD
Chelsea

The Constitution of the State of Michigan prohibits mandatory legislation to direct the activities of the state's medical schools. Consequently the current resolution passed by the 1971 Michigan legislature was permissive in its direction.

"So far none of the medical schools has such a department." This statement is true. However, in each of our three medical schools granting M.D. degrees, departments of family medicine are in some stage of development.

At Michigan State University's College of Human Medicine, an ad hoc committee has recommended to the dean and faculty that an autonomous department of family medicine, research and development be initiated. This department would be directed by a qualified practitioner of family medicine and would train family MD's. This recommendation should soon receive a decision at Michigan State University.

At Wayne State a Department of Community and Family Medicine is in operation. All junior medical students take a five weeks rotation in this department and in the senior year elective preceptorships with selected family physicians are available.

At the University of Michigan Medical School a family practice residency training program is ready for approval by the dean and faculty. This would involve the affiliation and the collaborative responsibility for training of family practice residents at the University of Michigan Medical Center, St. Joseph Mercy Hospital (Ann Arbor), and the Chelsea Community Hospital. This is looked upon as the initial step towards the establishment of a department of family medicine.

"Do you believe there is a need to establish Family Practice departments?" This need is self evident. A great deal of the present discontent about medical care is directed at the need for qualified and concerned primary care physicians. This is the type of doctor that the public wants, and may soon demand!

"What more can be done to foster their creation?" The medical schools need to be reminded, as tax-supported institutions, that they have an obligation to direct a major share of their activities and training endeavors to supply the type of physicians the people of Michigan require.

Specifically this responsibility can be realized by: (1) *Student requests* for curriculum changes to allow them to have exposure to and experience in family medicine training. Statistics from the University of Michigan Medical School show a definite trend toward interest in primary care and particularly family practice for senior year elective time (up 16.7% from 1971). (2) *Legislative Action.* Representative Marvin Stempien's committee was directed by the state legislature to study the training of doctors for family practice and the retraining of such doctors for practice in Michigan. (3) *Consumer demand* for family practice training. The Michigan Health Council, UAW-CIO, Farm Bureau and League of Women Voters are potent and vocal sources of potential support and should be enlisted.

The Michigan Academy of Family Physicians has as one of its goals the establishment of departments of family practice at each of the three medical schools. It is our desire to assist and work collaboratively with the medical schools to this end, and we intend to persistently and persuasively labor in this endeavor. We feel that the people of Michigan are entitled to have available competent and compassionate primary medical care, which can only be accomplished through training of family physicians in all Michigan medical schools by a Department of Family Practice.

(Doctor Fisher is president of the Michigan Academy of Family Physicians.)

Roy J. Gerard, MD
Saginaw

Throughout our country there is increasing evidence that we have a crisis in the delivery of health care. This crisis has developed because of several reasons, some of them related to specific regional differences, others related to more universal causes. Among them are:

1. The doctor-patient ratio which has not been

maintained or improved by the output of our nation's medical schools.

2. Increased utilization of medical manpower.
3. Distribution of physicians.

There are wide discrepancies in physician distribution; for instance, rural vs. urban areas with many shortages in rural areas, and in urban ghetto areas there has been a real decrease in the number of available physicians.

4. Increase in specialization without relation to the needs of communities. Some communities have upwards of 20 boarded general surgeons, no E.N.T. physicians and very small numbers of primary physicians.
5. Decrease in numbers of family physicians.
6. Increase in costs.

If in this country we develop a problem in transportation we would be foolish if we did not turn to the automobile industry for aid in solving this problem; likewise, when we in Michigan have a problem in health care delivery we would be foolish if we did not turn to our medical schools for aid in solving this problem.

While this presentation is to give reasons why Michigan State University should have a Department of Family Medicine, the reasons should be valid and also should apply to the University of Michigan and to Wayne as well as to the new school of osteopathic medicine. If you would allow me, I would like to treat the crisis of health care as I would a patient, using the Problem Oriented Record.

Family Medicine Problem List

Name: Crisis of Health Care Delivery

Number: ____________________

Date
Onset: 1930

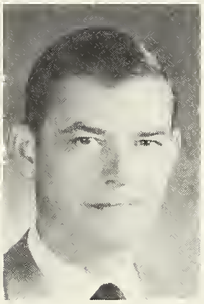
ACTIVE

1. Population Explosion.
2. Increased Utilization.
3. Distribution of Physicians—Doctor Patient Ratio
   Michigan—1 physician to 900 people
   Nationwide—1 physician to 600 people.
4. Increase in specialization.
5. Decrease in number of Family Physicians.
6. Increasing Costs.
7. There are no real programs sponsored by medical schools to develop Health Care Assistants, Para Medical Personnel and Health Care Teams.

INACTIVE

8. The threat of National Programs with increasing utilization.

Date
Resolved:



Doctor Fisher

Doctor Gerard

Problem 1
Population Explosion

Subjective Data:	Many patients showing up in the emergency room unable to contact or even break into the health care system.
Objective Data:	Ratio of patients to physicians. 1 to 900 Michigan 1 to 600 Nationwide
Plan:	1. Increase in size of medical schools classes. 2. State supported schools should insist on at least 5 years of state practice after graduation.

Problem 2
Increased Utilization

Subjective Data:	Emergency room patient population is ever increasing, all episodic care.
Objective Data:	No real evidence that we have reduced the incidence of the major disabling diseases, such as the degenerative diseases, cancer and strokes.
Plan:	Programs of health maintenance should be part of the medical schools' curricula. The medical schools should have or be part of a model of practice.

Today many of the systems of health care delivery are patterned after the university model. The old model of university medicine was specially oriented and fragmented with all the problems of today's medicine.

If university center models are oriented for health care delivery, then so would be the facsimiles. If the university center models are family medicine oriented so would be the facsimiles.

Problem 3
The Distribution of Physicians

Subjective Data:	There are many communities in the State of Michigan without physicians. There are parts of large communities without physicians.
Objective Data:	Saginaw, Michigan, for instance, with the population of 125,000 has a preponderance of physicians segregating themselves on the westside of the community, leaving a large segment of pop-

ulation on the eastside without primary care physicians or leaving their care on a catch as catch can basis, either in indigent clinic or in emergency room.

Plan: Develop models of practice, which could be developed for both urban and rural areas, for both affluent and ghetto areas, supervised and oriented towards primary care with proper integration of paramedical and specialist care.

Problem 4
Increase in Specialization

Subjective Data: There are many reports that patients have difficulty finding primary physicians. Many communities have no or very few primary physicians. The result is fragmentation of care with patients running from doctor to doctor on a referral basis, but no one taking primary responsibility for supervision.

Objective Data: More than 80% of the graduating classes in the last 10 years have gone into specialties.

Plan:

1. To expose students to the primary care model at the university level and in satellite models of practice throughout the state.
2. Exposure to teachers of family medicine in medical schools.
3. Reduce the trend towards over specialization.

Problem 5
The Decrease in Numbers of Family Physicians

Subjective Data: Many complaints of the shortage of family physicians, (people yearn for the good old days when the family doctor came on horse and buggy).

Objective Data: The numbers of graduating physicians who indicate that they want to go into family practice have been decreasing for approximately the last 30 years. Students emulate their teachers. There are no teachers of family medicine in medical schools.

Plan: A family medicine department of Michigan State University with the model of practice. (A center around which the specialist function would be integrated, would expose the medical student to the family physician in his proper environment with the proper relationship to the other specialties.) Problems 2, 3, 4 and 5 would all be on the way to solution with this model.

Problem 6
Increase Costs

Subjective Data: High premiums for health insurance.
Increased cost of health care.
National concern.
Most of this being consumed with episodic care.

Objective Data: Pressure in National Legislation.
Request for system overall.

Plan: Prepayment and other related ways of stretching the health dollar should be part of the university model. This would go a long way to helping solve problem 2, utilization.

Problem 7
No real programs sponsored by medical schools to develop health care assistants and paramedical personnel

Subjective Data: Many programs at community levels struggling toward development with many problems such as standards and licensures.

Objective Data: Over utilization of physician, where other personnel could perform as well or better.

Plan: Use the model at the university to develop a health manpower in order to insure a better health care delivery. Health care assistants and paramedical personnel could be developed at the university level within the model of practice.

One could develop teams of physicians, paramedical personnel and other health assistants that could be integrated into rural and ghetto areas where the physician shortage is particularly acute. This may be one way of keeping at least temporarily some of the graduating medical students in our state.

In summary—many of the problems related to the crisis in the delivery of health care are involved in deficiencies in the delivery system. Delivery system development should be a continuing responsibility of the medical schools of the state.

The delivery system developed at the university level should be or can be the prototype model for those facsimiles in the communities.

If Michigan State University develops a model of practice on its campus and has as its core a functioning Department of Family Medicine, many of the above mentioned problems would be resolved.

Doctor Gerard is director of the Family Practice Residency program of the Saginaw Cooperative Hospitals.

Jack R. Postle, MD
Petoskey

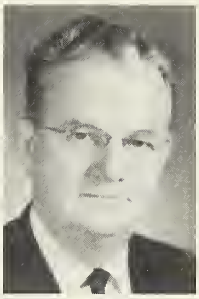
My crystal ball is sometimes cloudy, but on this issue fairly clear. What I see in the future on the medical scene is a continued centralization of medical care into regional centers staffed by highly trained specialists. I see some type of screening and referring satellites in outlying areas, with a definite working relationship with the regional center. This function will be served for a while still by general practitioners, but eventually it will be taken over by medical assistants trained for this purpose.

General or family practice, as we have known it, will continue to fade rapidly from the scene in spite of many efforts to revive it. The technology of modern medical practice demands specialization for mastery of any given portion thereof and it also requires sophisticated medical facilities for its application.

In spite of the legislature's good intentions to train more family doctors, I think they might as well try to bring back that bygone era of hand-packed ice cream and Sunday rides in the country. Let us cherish the memory, but spend our efforts trying to keep the medical delivery system abreast of a rapidly changing technological society.

(Doctor Postle is an obstetrician-gynecologist in private practice.)

William N. Hubbard, Jr., MD
Kalamazoo


Doctor Hubbard

Requiring medical schools to have departments of family medicine really involves two questions. The first of these is whether there should be formal programs established for the special educational needs of future family physicians; and the second question is whether these programs are best supported by a departmental organization.

The first issue that a medical school faces in any new effort is the source of funding. In addition to income related to the educational effort, there must also be income available from the patient care offered in the new program and for the research undertaken in it. It is not reasonable to expect that a viable new program can be created and maintained by parasitizing already inadequate medical school budgets.

In order to teach family medicine it is necessary for the medical school to have access to a clinical setting where *FAMILIES* are given both primary and continuing care. Since almost all hospital outpatients are now either referred to specialty clinics or are referred as individuals for episodic care, hospitals rarely offer whole family units both primary and continuing care. It is in my judgment useful to attempt an educational program in family medicine only in a clinical resource that offers primary and continuing care to entire families.

Of all forms of medical practice, the family physician is most responsive to the medical care pattern of the particular community. Where specialists are readily available and health care institutions highly developed, the role of the family physician will be very different indeed from the communities that do not have ready access to specialists and may not have highly developed health care institutions. It is therefore unlikely that a given curriculum plan can prepare the student appropriately for these two extremes. It would be very difficult also to construct a single department with enough manpower to provide the full range of educational opportunities needed by the many varieties of family physicians. In my opinion this suggests that an interdepartmental program rather than a segregated departmental structure would be most supportive of family medicine.

It is unlikely that enough specialists in family medicine will be trained to meet the need. As a result, I would urge that the broad specialties—internal medicine, pediatrics, obstetrics and gynecology, and general surgery—have (at least as electives) in their residency program a participation in the family practice environment so that these broad specialists can also support the purposes of family medicine.

To summarize, I would propose that educational programs in family medicine should be developed in the medical schools and should be fully funded when they are presented as new program proposals to the Legislature. Assured of this funding, a time limit could be placed during which the medical schools would be required to submit programs.

I would urge that htese programs do not need to be departmentalized, but rather should be able to draw on the full resources of the medical school faculty in an interdepartmental effort that would be based in a new clinical resource designed to give primary and continuing medical care to whole family units. These families should be representative of the entire community and should not be a stratified patient population; rather providing a cross-section of the family problems that will be met in general community practice.

A basic residency should be offered in family medicine. This same family medicine program should be available to supplement the broad specialty residencies.

In the most general terms, family medicine should be each physician's concern and its form should be responsive to the needs of the community in which it is practiced.

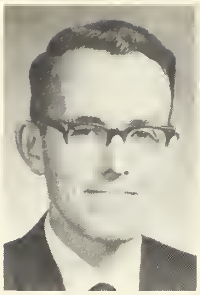
(Doctor Hubbard is vice president of Upjohn Co. and general manager of its pharamaceutical division. He was dean of the University of Michigan Medical School 1959-1970.)

Leland E. Holly II, MD
Muskegon

Philosophically and biologically it has been noted that man has survived so well because he is unspecialized. Since his feet have not been hooves nor his hands claws, he has met many environmental challenges successfully. Many other examples of the great potential of man's non-specialty can be derived.

Is there a message here?

Is it not true that the greatest impact of medicine on people has been through the physician who practices the non-specialty of family medicine? His great adaptability to the face-to-face



Doctor Holly

needs of people has been the shield of strength behind which the shortcomings of the practice of medicine have seemed less detrimental to the wellbeing of the patient.

In the last 20 years, however, there have not been enough of those fellows around and of those remaining, some have slipped into poor habits. Perhaps the decline in numbers and quality was in part due to their seeming relegation to the position of low man on the totem pole. Another factor may have been the obscuring of the real values of medical practice by the glories of specialization and the emphasis by medical training on false or incomplete goals of excellence. All of medicine has suffered.

Countering the trend, two factors have begun to operate. The new graduate physician appears to be oriented differently than his predecessors. People-care and face-to-face encounters where medical need and action are appear to signal a renaissance of the family practice philosophy even if not its mode of practice. At the same time a thoughtful, forward-looking breed of old-young family practitioners have sought improved skills and knowledge, as well as stature, with the formation of the "specialty" of family practice.

This is a program to efficiently deliver at the family level excellent medical care to a broad base of people suffering from a tremendous range of ills, real and imagined. This is the level where medicine has the most meaning and works the greatest good. This is a proud path for new graduates to follow.

Specialism as we see it in the surgeon, the radiologist, the cardiologist or what-have-you is but an extension, a sharpening if you will, of the skills of the family practitioner. The science of medicine is enhanced but the humanity is diluted. Indeed, the role of the family practitioner is not for every physician since it demands skills and understanding of scope and potential found only in those capable of "unspecialization."

The family practitioner must also be highly motivated and trained. Medical schools need not have fancy "departments of family practice" as long as they recognize the need to identify, motivate and train good young men qualified for this tough, front-line work in the delivery of health care. After all, family practice is the noblest of the specialties because it is characterized by a broad instead of a narrow range of excellence, because it stands at the front of the rest of us, and because it comes closest to fulfilling the ideal of the practice of medicine. That should be what medical schools are all about.

(Doctor Holly is a radiologist.)

Don Marshall, MD
Kalamazoo

A department of family or community medicine in a medical school could serve an important function, by coordinating the training of general practitioners, and by championing the importance of treating the whole man against the fractionizing effect of specialists. But whether the need for such a department is great could well be questioned. The same goal could be attained by a change in the attitude of the existing departments, in favor of the family doctor and his approach to medical care.

We must agree, I hope, on certain facts. 1) We always have had and always will need specialists. 2) The patient needs a point of entrance into the health care system, and there should be a broadly trained individual at or near that point to screen and supervise his medical needs, in a continuing manner. That person could well be a general or family doctor.

Such a physician should be expert in triage for referring to specialists, and must recognize his own few incapabilities, but he could give definitive care to the patient much of the time. 3) Every patient should have a personal health team leader, who will correlate all reports and decide management; this could be any specialist, but is preferably one with a broad training, as an internist or pediatrician, or better yet a family physician. 4) Specialists as a group know every medical item that the GP knows; but the GP should know more about the whole individual, his family and environment, than the specialist. 5) Just creating a department of family medicine would not automatically attain the above goals, any more than more dollars alone are solving the health needs of our people; the new department would have to succeed in gaining stated goals, or it would be useless.

Across this country and in Michigan there is a broad belief that we need more GPs, and that medical school faculties are prejudiced against GPs. Consequently the conviction has long been held by GPs and some others that their goal of training more GPs and of elevating the status of GPs is doomed to failure unless they can gain family medicine departments in medical schools. Such a department would presumably counterbalance and hopefully abolish the alleged prejudice against GPs. The truth of that assumption remains to be proven.

(Continued on page 346)

CALORIES/ 1 Cup Prepared Soup*

Beef Broth	25	Vegetable	77
Consomme	33	Tomato	79
Chicken with Rice	49	Cream of Asparagus	80
Chicken Gumbo	55	Cream of Chicken	87
Chicken Noodle	62	Beef	99
Chicken Vegetable	68	Cream of Potato	105
Turkey Noodle	72	Cream of Mushroom	131
Vegetable Beef	75	Green Pea	131

In planning high or low calorie diets, Campbell's more than 50 different soups offer you a wide choice. And, most of Campbell's Soups contain a wide variety of ingredients that can serve as supplementary sources of many essential nutrients.

* From "Nutritive Composition of Campbell's Products" which gives values of important nutritive constituents of all Campbell's Products. For your copy, write to Campbell Soup Company, Dept. 536, Camden, New Jersey 08101.

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for almost every patient and diet
..for every meal
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the 3 phases of Eve

All women are not equal in their endogenous hormonal output. And, while all oral contraceptives are fundamentally effective, they exhibit **differences in their activity levels and estrogen-progestogen ratios that affect different women differently**—in both short and long-term use. Some brands may be insufficient for the woman's needs or else may exceed them.

Searle offers a family of O.C. products that covers the range of women's needs to help you provide the right pill for the right woman at the right time.

the Ovulen phase

Most women* with a **balanced hormone profile and normal menses** do best on a middle-of-the-road pill that is neither estrogen dominant nor strongly progestogen dominant.

(*Typical clues—normal body build and breasts, feminine appearance, healthy skin and hair. Vaginal cytology slide—balanced "pink and blue.")

Some women having problems on other O.C.s might do well on Ovulen.

Ovulen has a distinctive hormonal balance that combines moderate estrogenic activity with a slight progestogen dominance. It has an excellent record of patient acceptance.

Ovulen®

Each white tablet contains. ethynodiol diacetate 1 mg./mestranol 0.1 mg.

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SEARLE

For brief summary of prescribing information, see following page.

the Demulen phase

Many women* who secrete **more estrogen** than most do well on a pill with lower estrogen activity and an increased progestogen overbalance.

(*Typical clues—shorter, plumper, full-breasted, with glowing skin and no wrinkles. Vaginal cytology slide "pink.")

Some women with special conditions that may be aggravated by higher estrogen-activity products may do better on this ratio.

Demulen combines minimal estrogenic activity with a moderate ratio of progestogen overbalance. It is particularly well suited to the young when low-dose (activity) is preferred. Demulen offers little risk of the most potent progestogen side effects; early breakthrough bleeding is often transient.

Demulen®

Each white tablet contains: ethynodiol diacetate 1 mg./ethinyl estradiol 50 mcg

Each pink tablet in Ovulen-28® and Demulen®-28 is a placebo, containing no active ingredients.

Both Ovulen and Demulen are available in 21- and 28-pill schedules.

the Enovid-E phase

Some women* who secrete **less estrogen** than most do best on a pill with a moderate estrogen overbalance.

(*Typical clues—oily complexion, acne, hirsutism, masculinity, flat chest. Vaginal cytology slide—"blue.")

Patients with estrogen deficiency may show:

premenopausal syndrome
early-cycle bleeding
scanty menses
intermittent depression
increased appetite
steady weight gain
vaginal candidiasis

Enovid-E not only provides increased estrogenic activity with low progestogen activity, but also contains the only progestogen that is not antiestrogenic. Therefore it offers less risk of high-dose progestogen side effects.

Enovid-E®

Each tablet contains: norethynodrel 2.5 mg./mestranol 0.1 mg.

Oral contraceptives are complex medications and, after reference to the prescribing information, should be prescribed with discriminating care.

for the 3 phases of Eve:

a family of O.C. products

Ovulen®

Each white tablet contains:
ethynodiol diacetate 1 mg./mestranol 0.1 mg.

Demulen®

Each white tablet contains:
ethynodiol diacetate 1 mg./ethinyl estradiol 50 mcg.

Each pink tablet in Ovulen-28® and Demulen®-28 is a placebo, containing no active ingredients.

Actions—Ovulen and Demulen act to prevent ovulation by inhibiting the output of gonadotropins from the pituitary gland. Ovulen and Demulen depress the output of both the follicle-stimulating hormone (FSH) and the luteinizing hormone (LH).

Special note—Oral contraceptives have been marketed in the United States since 1960. Reported pregnancy rates vary from product to product. The effectiveness of the sequential products appears to be somewhat lower than that of the combination products. Both types provide almost completely effective contraception.

An increased risk of thromboembolic disease associated with the use of hormonal contraceptives has now been shown in studies conducted in both Great Britain and the United States. Other risks, such as those of elevated blood pressure, liver disease and reduced tolerance to carbohydrates, have not been quantitated with precision.

Long-term administration of both natural and synthetic estrogens in subprimate animal species in multiples of the human dose increases the frequency of some animal carcinomas. These data cannot be transposed directly to man. The possible carcinogenicity due to the estrogens can be neither affirmed nor refuted at this time. Close clinical surveillance of all women taking oral contraceptives must be continued.

Indication—Ovulen and Demulen are indicated for oral contraception.

Contraindications—Patients with thrombophlebitis, thromboembolic disorders, cerebral apoplexy or a past history of these conditions, markedly impaired liver function, known or suspected carcinoma of the breast, known or suspected estrogen-dependent neoplasia and undiagnosed abnormal genital bleeding.

Warnings—The physician should be alert to the earliest manifestations of thrombotic disorders (thrombophlebitis, cerebrovascular disorders, pulmonary embolism and retinal thrombosis). Should any of these occur or be suspected the drug should be discontinued immediately.

Retrospective studies of morbidity and mortality conducted in Great Britain and studies of morbidity in the United States have shown a statistically significant association between thrombophlebitis, pulmonary embolism, and cerebral thrombosis and embolism and the use of oral contraceptives. There have been three principal studies in Britain[1-3] leading to this conclusion, and one[4] in this country. The estimate of the relative risk of thromboembolism in the study by Vessey and Doll[3] was about sevenfold, while Sartwell and associates[4] in the United States found a relative risk of 4.4. meaning that the users are several times as likely to undergo thromboembolic disease without evident cause as nonusers. The American study also indicated that the risk did not persist after discontinuation of administration and that it was not enhanced by long-continued administration. The American study was not designed to evaluate a difference between products. However, the study suggested that there might be an increased risk of thromboembolic disease in users of sequential products. This risk cannot be quantitated, and further studies to confirm this finding are desirable.

Discontinue medication pending examination if there is sudden partial or complete loss of vision, or if there is a sudden onset of proptosis, diplopia or migraine. If examination reveals papilledema or retinal vascular lesions medication should be withdrawn.

Since the safety of Ovulen and Demulen in pregnancy has not been demonstrated, it is recommended that for any patient who has missed two consecutive periods pregnancy should be ruled out before continuing the contraceptive regimen. If the patient has not adhered to the prescribed schedule the possibility of pregnancy should be considered at the time of the first missed period.

A small fraction of the hormonal agents in oral contraceptives has been identified in the milk of mothers receiving these drugs. The long-range effect to the nursing infant cannot be determined at this time.

Precautions—The pretreatment and periodic physical examinations should include special reference to the breasts and pelvic organs, including a Papanicolaou smear since estrogens have been known to produce tumors, some of them malignant, in five species of subprimate animals. Endocrine and possibly liver function tests may be affected by treatment with Ovulen or Demulen. Therefore, if such tests are abnormal in a patient taking Ovulen or Demulen, it is recommended that they be repeated after the drug has been withdrawn for two months. Under the influence of progestogen-estrogen preparations preexisting uterine fibromyomas may increase in size. Because these agents may cause some degree of fluid retention, conditions which might be influenced by this factor, such as epilepsy, migraine, asthma, cardiac or renal dysfunction, require careful observation. In breakthrough bleeding, and in all cases of irregular bleeding per vaginam, nonfunctional causes should be borne in mind. In undiagnosed bleeding per vaginam adequate diagnostic measures are indicated. Patients with a history of psychic depression should be carefully observed and the drug discontinued if the depression recurs to a serious degree. Any possible influence of prolonged Ovulen or Demulen therapy on pituitary, ovarian, adrenal, hepatic or uterine function awaits further study. A decrease in glucose tolerance has been observed in a significant percentage of patients on oral contraceptives. The mechanism of this decrease is obscure. For this reason, diabetic patients should be carefully observed while receiving Ovulen or Demulen therapy. The age of the patient constitutes no absolute limiting factor, although treatment with Ovulen or Demulen may mask the onset of the climacteric. The pathologist should be advised of Ovulen or Demulen therapy when relevant specimens are submitted. Susceptible women may experience an increase in blood pressure following administration of contraceptive steroids.

Adverse reactions observed in patients receiving oral contraceptives—A statistically significant association has been demonstrated between use of oral contraceptives and the following serious adverse reactions: thrombophlebitis, pulmonary embolism and cerebral thrombosis.

Although available evidence is suggestive of an association, such a relationship has been neither confirmed nor refuted for the following serious adverse reactions: neuro-ocular lesions, e.g., retinal thrombosis and optic neuritis.

The following adverse reactions are known to occur in patients receiving oral contraceptives: nausea, vomiting, gastrointestinal symptoms (such as abdominal cramps and bloating), breakthrough bleeding, spotting, change in menstrual flow, amenorrhea during and after treatment, edema, chloasma or melasma, breast changes (tenderness, enlargement and secretion), change in weight (increase or decrease), changes in cervical erosion and cervical secretions, suppression of lactation when given immediately post partum, cholestatic jaundice, migraine, rash (allergic), rise in blood pressure in susceptible individuals and mental depression.

Although the following adverse reactions have been reported in users of oral contraceptives, an association has been neither confirmed nor refuted: anovulation post treatment, premenstrual-like syndrome, changes in libido, changes in appetite, cystitis-like syndrome, headache, nervousness, dizziness, fatigue, backache, hirsutism, loss of scalp hair, erythema multiforme, erythema nodosum, hemorrhagic eruption and itching.

The following laboratory results may be altered by the use of oral contraceptives: hepatic function: increased sulfobromophthalein retention and other tests; coagulation tests: increase in prothrombin, Factors VII, VIII, IX and X; thyroid function: increase in PBI and butanol extractable protein bound iodine, and decrease in T^3 uptake values; metyrapone test and pregnanediol determination.

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norethynodrel 2.5 mg./mestranol 0.1 mg.

Actions—Enovid-E acts to prevent ovulation by inhibiting the output of gonadotropins from the pituitary gland. Enovid-E depresses the output of both the follicle-stimulating hormone (FSH) and the luteinizing hormone (LH).

Indication—Enovid-E is indicated for oral contraception.

The *Special Note, Contraindications, Warnings, Precautions* and *Adverse Reactions* listed above for Ovulen and Demulen are applicable to Enovid-E and should be observed when prescribing Enovid-E.

SEARLE **Enovid-E**®
brand of norethynodrel with mestranol

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Where "The Pill" Began

Try Eutron™ on a stubborn diastolic

pargyline hydrochloride 25 mg. and methyclothiazide 5 mg.

100 (Grooved) No. 7240
Filmtab®
EUTRON™
Pargyline
Hydrochloride
Methyclothiazide
Caution Federal (U.
law prohibits dispensing
without prescription.
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16
113

When you're not satisfied with your patient's diastolic "end point" under present treatment, consider a trial of Eutron. It will often bring further reduction of blood pressure, even in severe diastolic hypertension.

Special Characteristics of Eutron:

Course of therapy usually is smooth, with blood pressure reducing gradually over one to three weeks.

Around-the-clock effect from a single daily dose.

Provides diuresis when edema accompanies hypertension.

Free of central depressant action.

Lower doses of pargyline hydrochloride are made possible because of the methyclothiazide component.

Special Restrictions (see back of page):

Tyramine-containing foods (e.g. aged cheese) should be avoided. (For further listing of foods, see back of page.)

If alcohol is used, it should be used cautiously and in reduced amounts.

Patients should be warned against the concurrent use of non-prescription medications (particularly cold preparations and antihistamines), or prescription drugs without physician's consent.

Discontinue Eutron at least two weeks prior to elective surgery.

Before prescribing Eutron, see prescribing information in package insert. A brief summary appears on next page.

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TM—Trademark

Brief Summary
EUTRON™
pargyline hydrochloride and methyclothiazide
Filmtab®

INDICATIONS. EUTRON (pargyline hydrochloride and methyclothiazide) is indicated in the treatment of patients with moderate to severe hypertension, especially those with severe diastolic hypertension. *It is not recommended for use in patients with mild or labile hypertension amenable to therapy with sedatives and/or thiazide diuretics alone.*

Because of the potent diuretic properties of methyclothiazide, the combination is particularly suited for use when congestive heart failure or other conditions requiring diuretic therapy coexist with hypertension, or when edema attributable to antihypertensive therapy develops.

As discussed in regard to dosage and administration, it is desirable to establish the dosage requirements for EUTRON by the administration of Eutonyl and Enduron separately.

CONTRAINDICATIONS. 1. Pargyline therapy is contraindicated in patients with pheochromocytoma, paranoid schizophrenia, hyperthyroidism and advanced renal failure.

2. Pargyline should not be administered to those with malignant hypertension, or to children under twelve years of age because significant clinical information concerning the use of the drug in these conditions is not available.

3. In general, the following drugs or agents are contraindicated in patients receiving pargyline hydrochloride:

a. Centrally acting sympathomimetic amines such as amphetamine and its derivatives (also found in anorectic preparations).

Peripherally acting sympathomimetic drugs such as ephedrine and its derivatives (also found in nasal decongestants, hay fever preparations and cold remedies).

b. Aged and natural cheese (e.g., Cheddar, Camembert, and Stilton), and other foods (e.g., pickled herring, Chianti wine, pods of broad beans, chicken livers, chocolate and yeast products), which require the action of bacteria or molds for their preparation or preservation, because of the presence of pressor substances such as tyramine. Banana peels are also contraindicated. Cream cheese, processed cheese, and cottage cheese can be allowed in the diet during EUTRON therapy, since their tyramine content is inconsequential.

In some patients receiving EUTRON, tyramine may precipitate an abrupt rise in blood pressure accompanied by some or all of the following: severe headache, chest pain, profuse sweating, palpitation, tachycardia or bradycardia, visual disturbances, stertorous breathing, coma, and intracranial bleeding (which could be fatal). A phenothiazine derivative or phentolamine may be administered parenterally for treatment of such an acute hypertensive reaction.

c. Parenteral administration of reserpine or guanethidine may cause hypertensive reactions from sudden release of catecholamines. Parenteral use of these drugs is contraindicated during, and for at least one week following, treatment with EUTRON.

d. Imipramine, amitriptyline, desipramine, nortriptyline, or their analogues should not be used with pargyline. The use of these drugs with monoamine oxidase inhibitors has been reported to cause vascular collapse and hyperthermia which may be fatal. A drug-free interval (about two weeks) should separate therapy with EUTRON and use of these agents.

e. Methyldopa or dopamine, which may cause hyperexcitability in patients receiving pargyline, should not be given.

f. Other monoamine oxidase inhibitors should not be added to a EUTRON regimen since they may augment the effects of pargyline.

4. Methyclothiazide is contraindicated in patients with a known sensitivity to methyclothiazide and/or other thiazide diuretics. It should not be used in patients with severe renal disease (except nephrosis) or complete renal shutdown. Thiazide diuretics should not be used in the presence of severe liver disease and/or impending hepatic coma Hepatic coma has been reported as a consequence of hypokalemia in patients receiving thiazide diuretics.

WARNINGS

A. PATIENTS

1. PATIENTS SHOULD BE WARNED AGAINST THE USE OF ANY OVER-THE-COUNTER PREPARATIONS, PARTICULARLY "COLD PREPARATIONS" AND ANTIHISTAMINES OR PRESCRIPTION DRUGS WITHOUT THE KNOWLEDGE AND CONSENT OF THE PHYSICIAN
2. PATIENTS SHOULD BE CAUTIONED ON THE USE OF CHEESE (SEE CONTRAINDICATIONS) AND ALCOHOLIC BEVERAGES IN ANY FORM.
3. PATIENTS SHOULD BE WARNED ABOUT THE LIKELIHOOD OF THE OCCURRENCE OF ORTHOSTATIC HYPOTENSION.
4. PATIENTS SHOULD BE INSTRUCTED TO REPORT PROMPTLY THE OCCURRENCE OF SEVERE HEADACHE OR OTHER UNUSUAL SYMPTOMS.
5. PATIENTS WITH ANGINA PECTORIS OR CORONARY ARTERY DISEASE SHOULD BE ESPECIALLY WARNED NOT TO INCREASE THEIR PHYSICAL ACTIVITIES IN RESPONSE TO A DIMINUTION IN ANGINAL SYMPTOMS OR AN INCREASE IN WELL-BEING OCCURRING DURING TREATMENT WITH EUTRON.

B. PHYSICIANS

1. WHEN INDICATED THE FOLLOWING SHOULD BE CAUTIOUSLY PRESCRIBED IN REDUCED DOSAGES:
   a. ANTIHISTAMINES
   b. HYPNOTICS, SEDATIVES OR TRANQUILIZERS
   c. NARCOTICS (MEPERIDINE SHOULD NOT BE USED)
2. DISCONTINUE EUTRON AT LEAST TWO WEEKS PRIOR TO ELECTIVE SURGERY.
3. IN EMERGENCY SURGERY THE DOSE OF NARCOTICS OR OTHER PREMEDICATIONS SHOULD BE REDUCED TO 1/4 TO 1/5 THE USUAL AMOUNT. CLINICAL EXPERIENCE HAS SHOWN THAT RESPONSE TO ALL ANESTHETIC AGENTS CAN BE EXAGGERATED IN PATIENTS RECEIVING EUTRON THEREFORE THE DOSE OF THE ANESTHETIC SHOULD BE CAREFULLY ADJUSTED.
4. PARGYLINE HYDROCHLORIDE MAY INDUCE HYPOGLYCEMIA.
5. CARE SHOULD BE EXERCISED IN USING EUTRON IN PATIENTS WITH ADVANCED RENAL FAILURE.

The possibility of sensitivity reactions to methyclothiazide or pargyline should be considered in patients with a history of allergy or bronchial asthma.

There have been several reports published and unpublished, concerning nonspecific small bowel lesions consisting of stenosis with or without ulceration, associated with the administration of enteric-coated thiazides with potassium salts. These lesions may occur with enteric-coated potassium tablets alone or when they are used with nonenteric-coated thiazides, or certain other oral diuretics.

These small bowel lesions have caused obstruction, hemorrhage and perforation. Surgery was frequently required and deaths have occurred.

Available information tends to implicate enteric-coated potassium salts although lesions of this type also occur spontaneously. Therefore, coated potassium-containing formulations should be administered only when adequate dietary supplementation is not practical, and should be discontinued immediately if abdominal pain, distention, nausea, vomiting or gastrointestinal bleeding occurs.

The possibility of exacerbation or activation of systemic lupus erythematosus has been reported for sulfonamide derivatives, including thiazides.

EUTRON does not contain added potassium.

USE IN PREGNANCY

Pargyline Hydrochloride. Safe use of pargyline during pregnancy or lactation has not yet been established. Before prescribing pargyline in pregnancy, in lactation, or in women of childbearing age, the potential benefits of the drug should be weighed against its possible hazard to mother and child.

Methyclothiazide. Thiazides should be used with caution in pregnant women and nursing mothers since they cross the placental barrier and appear in cord blood and in breast milk. The use of thiazides may result in fetal or neonatal jaundice, bone marrow depression and thrombocytopenia, altered carbohydrate metabolism in newborn infants of mothers showing decreased glucose tolerance, and possible other adverse reactions which have occurred in the adult. When the drug is used in women of childbearing age, the potential benefits of the drug should be weighed against the possible hazards to the fetus.

PRECAUTIONS

Pargyline Hydrochloride. The therapeutic response to a variety of drugs may be changed, or exaggerated, in patients receiving a monoamine oxidase inhibitor such as pargyline hydrochloride. Caffeine, alcohol, antihistamines, barbiturates, chloral hydrate, and other hypnotics, sedatives, tranquilizers and narcotics (meperidine should not be used), should be used cautiously and at reduced dosage in patients who are taking pargyline.

Pargyline has not been shown to damage the kidney or liver. However, laboratory studies including complete blood counts, urinalyses, and liver function tests should be performed periodically. The drug should be used with caution in the presence of liver disease. All patients with impaired circulation to vital organs from any cause including those with angina pectoris, coronary artery disease, and cerebral arteriosclerosis should be closely observed for symptoms of orthostatic hypotension. If hypotension develops in these patients, EUTRON dosage should be reduced or therapy discontinued since severe and/or prolonged hypotension may precipitate cerebral or coronary vessel thromboses.

The hypotensive effect of pargyline may be augmented by febrile illnesses. It may be advisable to withdraw the drug during such diseases.

Since pargyline is excreted primarily in the urine, patients with impaired renal function may experience cumulative drug effects. Such patients should also be watched for elevations of blood urea nitrogen and other evidence of progressive renal failure. If such alterations should persist and progress, the drug should be discontinued.

An increased response to central depressants may be manifested by acute hypotension and increased sedative effect. Pargyline also may augment the hypotensive effects of anesthetic agents and surgery. For this reason, the drug should be discontinued from at least two weeks prior to surgery.

In the event of emergency surgery smaller than usual doses (1/4 to 1/5) of narcotics, analgesics, sedatives, and other premedications should be used. If severe hypotension should occur, this can be controlled by small doses of a vasopressor agent such as levarterenol.

Pargyline therapy should not be used in individuals with hyperactive or hyperexcitable personalities, as some of these patients show an undesirable increase in motor activity with restlessness, confusion, agitation and disorientation. Clinical studies have shown that pargyline may unmask severe psychotic symptoms such as hallucinations or paranoid delusions in some patients with pre-existing serious emotional problems. This can usually be controlled by judicious administration of chlorpromazine intramuscularly, or other phenothiazines, the patient remaining supine for one hour after administration.

Pargyline should be used with caution in patients with Parkinsonism, as it may increase symptoms. In addition, great care is required if pargyline is administered in conjunction with anti-parkinsonian agents.

In experience to date, pargyline has not been associated with eye changes or optic atrophy as reported with the use of some hydrazine monoamine oxidase inhibitors. However, patients receiving this drug for prolonged periods should be examined for any changes in color perception, visual fields, fundi, and visual acuity.

Clinical reports state that certain individuals receiving pargyline for a prolonged period of time are refractory to the nerve-blocking effects of local anesthetics, e.g., lidocaine.

Methyclothiazide. Thiazide therapy should be used with caution in patients with severely impaired renal function because of the possibility of cumulative effects. Caution is also necessary in patients with severely impaired hepatic function or progressive liver disease.

Thiazide drugs may reduce response to levarterenol. Accordingly, the dosage of vasopressor agents may need to be modified in surgical patients who have been receiving thiazide therapy.

Thiazide drugs may increase the responsiveness to tubocurarine.

The antihypertensive effect of the drug may be enhanced in the sympathectomized patient.

All patients should be observed for clinical signs of fluid or electrolyte imbalance, including hyponatremia ("low-salt" syndrome). These include thirst, dryness of the mouth, lethargy and drowsiness.

Hypokalemia may occur during therapy with methyclothiazide. In such cases supplemental potassium may be indicated. Potassium depletion can be hazardous in patients taking digitalis. Myocardial sensitivity to digitalis is increased in the presence of reduced serum potassium and signs of digitalis intoxication may be produced by formerly tolerated doses of digitalis. Hypochloremic alkalosis may occur following intensive or prolonged thiazide therapy. Replacement of chloride may be indicated in such cases.

Thiazides may decrease serum P.B.I. levels without signs of thyroid disturbance.

ADVERSE REACTIONS. Generally side effects should not be severe or serious when the recommended dosages are used, and necessary precautions are observed. If side effects are severe or persist in spite of symptomatic treatment, the dosage should be reduced or the drug withdrawn. See also Warnings and Precautions.

Pargyline Hydrochloride. The most frequently occurring side effects are those associated with orthostatic hypotension (dizziness, weakness, palpitation, or fainting). These usually respond to a reduction of dosage. Patients should be warned against rising to a standing position too quickly, especially when getting out of bed. Severe and persistent orthostatic hypotension should be avoided by reduction in dosage and/or discontinuation of therapy.

Mild constipation, fluid retention with or without edema, dry mouth, sweating, increased appetite, arthralgia, nausea and vomiting, headache, insomnia, difficulty in micturition nightmares, impotence and delayed ejaculation, rash and purpura, have also been encountered. Hyperexcitability, increased neuromuscular activity (muscle twitching) and other extra-pyramidal symptoms have been reported. Gain in weight may be due either to edema or increased appetite. Drug fever is extremely rare. In some patients reduction of blood sugar has been noted. Although the significance of this has not been elucidated, the possibility of hypoglycemic effects should be borne in mind. Congestive heart failure has been reported in patients with reduced cardiac reserve.

Methyclothiazide. Side effects that may accompany thiazide therapy include anorexia, nausea, vomiting, diarrhea, headache, dizziness, paresthesias, weakness, skin rash, photosensitivity. Jaundice and pancreatitis also have been reported.

Blood dyscrasias, including thrombocytopenia with purpura, agranulocytosis and aplastic anemia, have been reported with thiazide drugs.

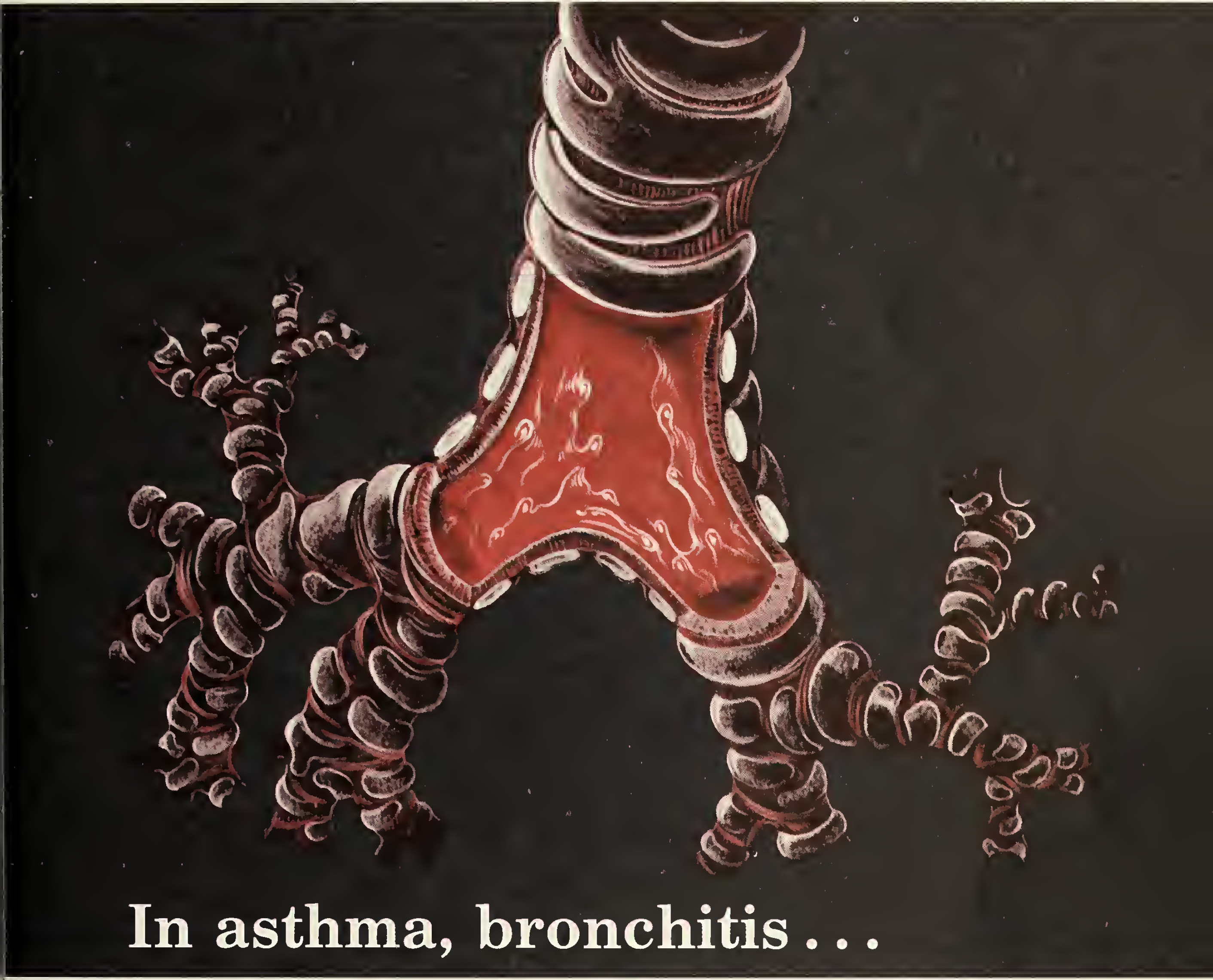
Thiazides have been reported, on rare occasions, to have elevated serum calcium to hypercalcemic levels. The serum calcium levels have returned to normal when the medication has been stopped. This phenomenon may be related to the ability of the thiazide diuretics to lower the amount of calcium excreted in the urine.

Elevations of blood urea nitrogen, serum uric acid, and blood sugar have occurred with the use of thiazide drugs. Symptomatic gout may be induced.

Although not established as an adverse effect of methyclothiazide, it has been reported that thiazide diuretics may produce a cutaneous vasculitis in elderly patients.

®FILMTAB—Film-sealed tablets, Abbott. TM—Trademark 204364

MOVE-OUT STICKY MUCUS...



In asthma, bronchitis . . .

"Many physicians use iodides intravenously when they suspect that the main reason for airway obstruction is sticky mucus but oral iodides are more likely to exert an expectorant action."[1]

"For the viscid sputum, potassium iodide (. . . preferable as enteric coated tablets) may be best."[2]

Provide tastefree, well-tolerated KI in convenient SLOSOL coated tablets–

IODO-NIACIN®

COLE

Each SLOSOL coated tablet contains potassium iodide 135 mg. and niacinamide hydroiodide 25 mg.

please see next page for prescribing information–

Promote Productive Cough-

"The productive cough serves the necessary purpose of removing excess mucus from the bronchial tree."[3]

". . . there is clear evidence that the loosening of the bronchial mucus blanket must begin from within the underlying mucus glands where it is anchored and not from the surface. Complications of iodides are too occasional to avoid the use of this valuable medication."[3]

Rx Information:

INDICATIONS: The primary indication for Iodo-Niacin is in any clinical condition where iodide therapy is desired. All of the usual indications for the iodides apply to Iodo-Niacin and include:

RESPIRATORY DISEASE: The use of Iodo-Niacin is indicated whenever an expectorant action is desired to increase the flow of bronchial secretion and thin out tenacious mucus as seen in bronchial asthma, and other chronic pulmonary disease. Iodo-Niacin has also proven of value in sinusitis, bronchitis, bronchiectasis, and other chronic and acute respiratory diseases where the expectorant action of iodide is desired.

THYROID DISEASE: Iodo-Niacin is indicated in any thyroid disorder due to iodine deficiency, such as endemic goiter or hypoplastic goiter, and where hypothyroidism is secondary to iodine deficiency. Iodo-Niacin will suppress mild hyperthyroidism completely, and partially suppress more severe hyperthyroid states. Iodo-Niacin is also of value in suppressing the symptoms of hyperthyroidism and decreasing the size and vascularity of the thyroid gland prior to thyroidectomy.

ARTERIOSCLEROSIS: Iodides have been reported as relieving some of the symptoms associated with arteriosclerosis. The mechanism of action is unknown, but the effects are documented.

OPHTHALMOLOGY: Iodo-Niacin has been reported to be of value in retinal and vitreous hemorrhages. The mechanism of action is unknown, but absorption of the hemorrhagic areas has been observed following use of this drug. It is also reported to be of value in reducing or removing vitreous floaters.

SIDE EFFECTS: Serious adverse side effects from the use of Iodo-Niacin are rare. Mild symptoms of iodism such as metallic taste, skin rash, mucous membrane ulceration, salivary gland swelling, and gastric distress have occurred occasionally. These generally subside promptly when the drug is discontinued. Pulmonary tuberculosis is considered a contraindication to the use of iodides by some authorities, and the drug should be used with caution in such cases. Rare cases of goiter with hypothyroidism have been reported in adults who had taken iodides over a prolonged period of time, and in newborn infants whose mothers had taken iodides for prolonged periods. The signs and symptoms regressed spontaneously after iodides were discontinued. The causal relationship and exact mechanism of action of iodides in this phenomenon are unknown. Appropriate precautions should be followed in pregnancy and in individuals receiving Iodo-Niacin for prolonged periods.

DOSAGE: The oral dose for adults is two tablets after meals taken with a glass of water. For children over eight years, one tablet after meals with water. The dosage should be individualized according to the needs of the patient on long-term therapy.

HOW SUPPLIED: Cole's Iodo-Niacin tablets are available in bottles of 100, 500 and 1,000. Slosol coated pink. NDC 55-6458.

IODO-NIACIN®

Each SLOSOL tablet contains potassium iodide 135 mg. and niacinamide hydroiodide 25 mg. Sig. *ij* tabs. t.i.d. p.c.

References: 1. Itkin, I. H., Am. Fam. Phys. 4:83, 1971. 2. Feinberg, S. M., Consultant Sept., 1971, pg. 32. 3. Bookman, R., Ann. Allerg. 29:367, 1971.

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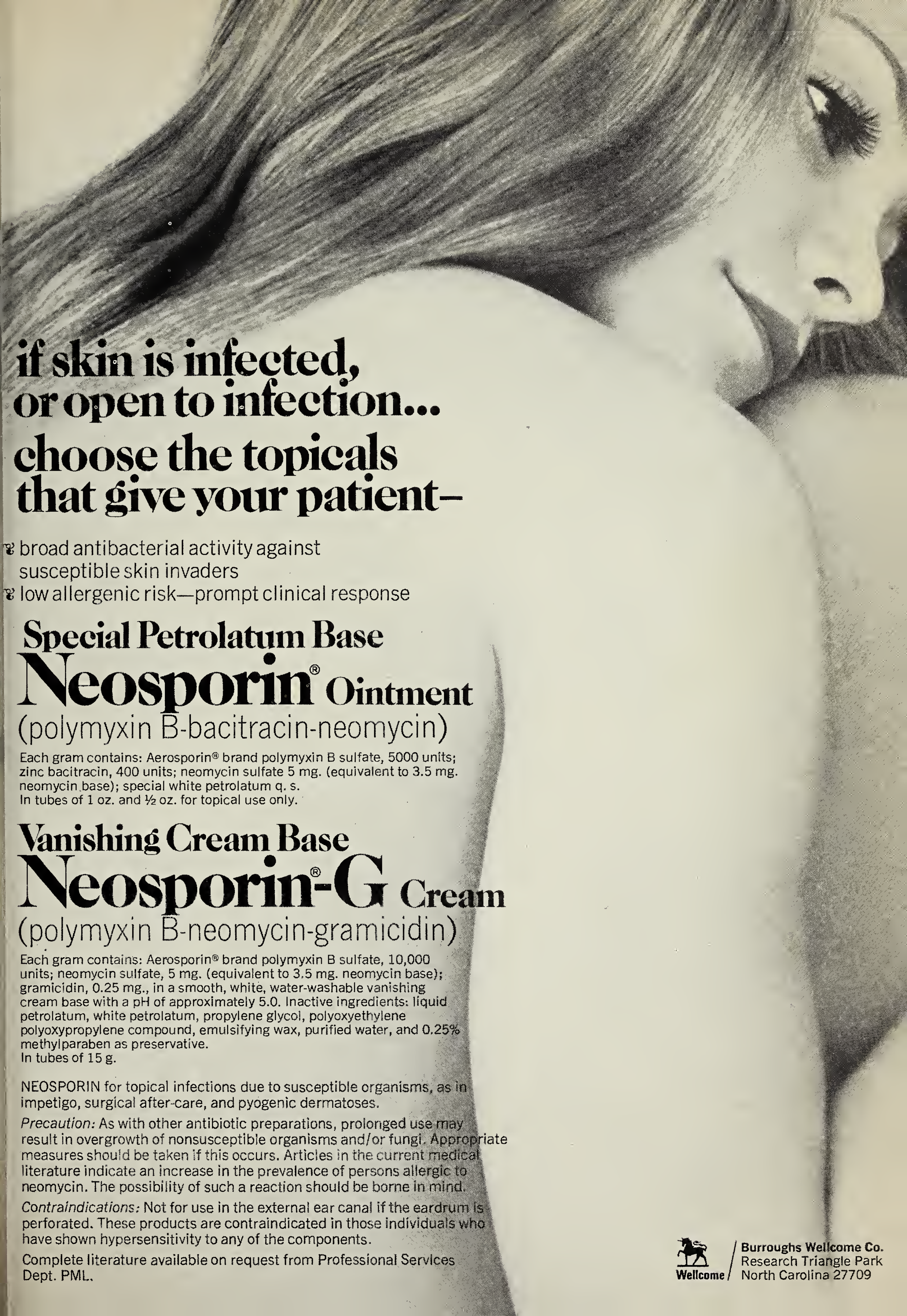

if skin is infected, or open to infection...

choose the topicals that give your patient–

- broad antibacterial activity against susceptible skin invaders
- low allergenic risk—prompt clinical response

Special Petrolatum Base

Neosporin® Ointment

(polymyxin B-bacitracin-neomycin)

Each gram contains: Aerosporin® brand polymyxin B sulfate, 5000 units; zinc bacitracin, 400 units; neomycin sulfate 5 mg. (equivalent to 3.5 mg. neomycin base); special white petrolatum q. s.
In tubes of 1 oz. and ½ oz. for topical use only.

Vanishing Cream Base

Neosporin®-G Cream

(polymyxin B-neomycin-gramicidin)

Each gram contains: Aerosporin® brand polymyxin B sulfate, 10,000 units; neomycin sulfate, 5 mg. (equivalent to 3.5 mg. neomycin base); gramicidin, 0.25 mg., in a smooth, white, water-washable vanishing cream base with a pH of approximately 5.0. Inactive ingredients: liquid petrolatum, white petrolatum, propylene glycol, polyoxyethylene polyoxypropylene compound, emulsifying wax, purified water, and 0.25% methylparaben as preservative.
In tubes of 15 g.

NEOSPORIN for topical infections due to susceptible organisms, as in impetigo, surgical after-care, and pyogenic dermatoses.

Precaution: As with other antibiotic preparations, prolonged use may result in overgrowth of nonsusceptible organisms and/or fungi. Appropriate measures should be taken if this occurs. Articles in the current medical literature indicate an increase in the prevalence of persons allergic to neomycin. The possibility of such a reaction should be borne in mind.

Contraindications: Not for use in the external ear canal if the eardrum is perforated. These products are contraindicated in those individuals who have shown hypersensitivity to any of the components.

Complete literature available on request from Professional Services Dept. PML.

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When irritable colon feels like this

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this sm
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...in the presence of spasm or hypermotility, gas distension and discomfort, **KINESED**® provides more complete relief:

☐ **belladonna alkaloids—for the hyperactive bowel**
☐ **simethicone—for accompanying distension and pain due to gas**
☐ **phenobarbital—for associated anxiety and tension**

Composition: Each chewable, fruit-flavored, scored tablet contains: 16 mg. phenobarbital (warning: may be habit-forming); 0.1 mg. hyoscyamine sulfate; 0.02 mg. atropine sulfate; 0.007 mg. scopolamine hydrobromide; 40 mg. simethicone.
Contraindications: Hypersensitivity to barbiturates or belladonna alkaloids, glaucoma, advanced renal or hepatic disease.
Precautions: Administer with caution to patients with incipient glaucoma, bladder neck obstruction or urinary bladder atony. Prolonged use of barbiturates may be habit-forming.
Side effects: Blurred vision, dry mouth, dysuria, and other atropine-like side effects may occur at high doses, but are only rarely noted at recommended dosages.
Dosage: Adults: One or two tablets three or four times daily. Dosage can be adjusted depending on diagnosis and severity of symptoms. Children 2 to 12 years: One half or one tablet three or four times daily. Tablets may be chewed or swallowed with liquids.

STUART PHARMACEUTICALS | Pasadena, California 91109 | Division of ATLAS CHEMICAL INDUSTRIES, INC.

(from the Greek **kinetikos**,
to move,
and the Latin **sedatus**,
to calm)

KINESED®
antispasmodic/sedative/antiflatulent

pring peeper (tree frog, *Hyla crucifer*):
his small amphibian can expand
ts throat membrane with air until it is
wice the size of its head.

Doctor Marshall

Mr. Wieman

What is unique about the GP? Despite a department of family medicine, students would be taught medical diagnosis and treatment by specialists as they are today. Psychiatry and obstetrics and heart disease are the same whether the patient faces a GP or is inside the Mayo Clinic. I have heard a Michigan dean reply, when urged to have a department of family medicine, "What would we teach differently than is being taught today?" When GPs have a scientific meeting, they invite specialists in to lecture.

I believe there is a feeling today that a department of family medicine could and should rearrange existing knowledge, and change the emphasis, in the teaching of GPs. It would not teach different facts, but would coordinate what is now being taught into a different approach, that of studying and caring for the whole man, instead of his separate systems. A department of family medicine could alter the curriculum to give more training to the GP in psychosomatic and behavioral problems, the sociology and economics and preventive aspects of family medical care, and a more sophisticated familiarity with the referral resources of a community.

A new department of family medicine in our medical schools could do much, if established and given full cooperation. The same result could probably be obtained without such a new department, if the existing faculty would acknowledge the same goals, and act to attain them.

(Doctor Marshall is an ophthalmologist. He is a former MSMS councilor and past president of the Michigan Association for Regional Medical Programs.)

James L. Weatherhead
East Lansing

It occurs to me that the first question one must ask is, "How best may we meet the ever increasing primary family needs of the Michigan medical consumer?" A great portion of this answer must be the turning out, via our state institutions, of more primary family practitioners.

Logically, the next question needing an answer is, "How may we increase the percentage of graduating physicians committed to a life time of practice in this needed field?" I believe this answer lies in the minds and wills of medical students somewhere in the midst of their first and second years of training.

Yes, it is my opinion that only if medical students, during their training, are favorably *exposed* to family medicine, will our existing medical colleges indeed graduate sorely needed workers in the primary care field.

If the key word above is "exposure," then perhaps the actual mandate to our state's medical schools is to discover the best mode or vehicle to meaningfully picture in every student's "mind's eye," the best conceptual image of family medicine during a formative stage of undergraduate training.

In short, we must "sell" or make appealing the family medicine concept to *students!*

Having read of the experiences of the 20 now existent departments of family medicine in the U.S., my own opinion is that the establishment of structured departments may *not* be the only nor the best way of accomplishing the heretofore discussed objective. This is by no means to say, that said departments are not warranted. I believe there *is* a basis for their formation. Department formation, however, is likely not the proverbial "cure-all" as envisioned by others in this state.

Clearly, family medicine is not the same as internal medicine, nor pediatrics, nor even the same as a university health service physician or emergency room physician. It is, in fact, a very specialized brand of medical practice requiring special skills, training and personality types. It seems to follow then, that as any other medical specialty, family medicine should develop its objectives, nomenclature, its own literature and, of course, research. So for *these* reasons, family medicine is truly a "specialty" deserving of all the burdens, academic responsibilities and prestige accorded to its fellow specialty fields.

Based on my own experiences and interaction with student colleagues at all three state institutions, I believe that the presence alone, of even the most prestigious department of family medicine, would probably not result in a sharp percentage increase of graduating family practitioners.

What then, can be done to augment student decisions for family medicine in the presence or absence of a formal department of family medicine? A great factor could be early, adequate exposure to the practicing family physician in his own office setting, in his community hospital setting and most importantly in the university setting. Given that a student's only exposure is the mention of "the L.M.D." in the case presentation at medical grand rounds or a "last ditch," third or fourth year experience in "boondock" or "ghetto" medicine, what chance for appeal as "Good Quality Clinical Medicine" has family practice? On the other hand, if from day one, a student sees a family physician as one of his physical diagnosis instructors or sees a positive consultation relationship with university clinical staff or even is encouraged to participate with the family physician in community health care, it is then more likely that family practice will be authentically viewed as a "peer" in the array of medical specialties.

Finally, it is of note that the manner in which departments of family medicine are organized, largely determines their effectiveness, indeed, their viability in the university setting. According to a communication from the A.A.G.P. on September 24, 1971, there exist 20 departments of family medicine and 20 "divisions or offices" of family medicine in the nation's medical schools. Those programs initiated by med-school faculty and family practice residencies with administrative approval have done markedly better in terms of smooth implementation and annual increases of family practitioners than have organizations initiated by deans without the hearty support of faculty and existent community personnel.

To summarize, I believe the onus to meet Michigan's growing primary physician deficit is *not* solely on the shoulders of medical school administrators, but must jointly be shared by medical school faculty, curriculum planners, family practice residencies, community hospitals and most importantly the Michigan Academy of Family Practice. Michigan-trained family practitioners for Michigan will not increase in numbers without student introduction and interest during their formative undergraduate years.

(Mr. Weatherhead is chairman of the Family Practice Club at Michigan State University.)

Henry M. Wieman
Detroit

I believe it is imperative that Departments of Family Medicine be established in Michigan medical schools. Such a move is overdue. I am happy to see that the state legislature has acted in this direction, but I feel that if the "encouragement" fails, stronger steps should be taken.

I openly admit that I am biased, because I plan on becoming a family practitioner. I feel the need for a family medicine department in order that the medical school can train me in my future specialty.

At one time, a majority of medical school graduates became general practitioners and presumably the faculty of medical schools saw themselves training general practitioners.

Needless to say, times have changed, both in the fate of medical school graduates and the attitudes of the teaching faculty. Probably partly in reaction to this state of affairs, and due to the logarithmic growth of medical knowledge and technology, family medicine has carved out a specialty of its own. I feel that my need to be exposed to my future specialty in medical school is a real need for many medical students.

Besides teaching those of us who may choose family practice, a department of family medicine could benefit students who choose another specialty as well. Neurologic problems are seen in family practice, for instance, and vice versa. Problems of real people rarely fall entirely within the boundaries of a given specialty's purview. I may have occasion to trust the care of a patient to a neurologist, and the more I know about how the neurologist is likely to handle the situation, the more helpful I can be in providing long-term care and guidance for the patient and his family. Likewise, the neurologist may have occasion to trust the care of a patient to a family practitioner and the same considerations apply.

The medical school as a whole needs a department of family medicine. The perspective and experience of family medicine specialists would be useful in the academic community of the medical school. Medical schools need, and family practitioners deserve, their involvement in the shaping of priorities and curricula of the schools.

Most students pick their specialty or change their minds about their specialty while in medical school. In view of the widely held belief, which I share, that there is a great undersupply of family practitioners and a relative oversupply of many of the other specialties, means must be found to encourage medical students to become family practitioners. I don't think that departments of family medicine will guarantee more family practitioners and I certainly don't think it should be the only effort in this direction; however, it seems obvious that a medical student floundering around in his junior year is influenced by the men around him and the interesting subjects presented. It would certainly seem that some family practitioners around a medical school would land a few floundering juniors.

Well, besides this golden-penned rhetoric, what methods should be used to bring departments of family medicine about? It should be recognized that departments, especially good ones, aren't built in a day.

I think the legislature should use financial incentives to demand the creation of these departments. I think the legislature has the right to influence the institutions it finances, particularly if it thinks the institution is not performing its civic duty properly. Meanwhile, family practitioners interested in teaching in the state should continue to forcefully offer their services as teachers to the medical schools. I know that at Wayne, efforts of this kind have been fruitful and we have a Department of Community and Family Medicine which meets some of the needs discussed above, and in time, I am sure, will meet more of them.

Hopefully, family medicine departments will evolve without recourse to coercion by the legislature.

(Mr. Wieman is a member of the junior class at Wayne State University's School of Medicine.)

In the glaucoma patient
on cerebral or peripheral
vasodilator therapy
no treatment
conflict
reported

VASODĪLAN®

(ISOXSUPRINE HCl)

the compatible vasodilator

- no reported increase of intraocular pressure.
- conflicts have not been reported with diuretics, corticosteroids, antihypertensives or miotics.
- complications in the treatment of coronary insufficiency, hypertension, diabetes, peptic ulcer or liver disease have not been reported.

In fact, there are no known contraindications in recommended oral doses other than it should not be given in the presence of frank arterial bleeding or immediately postpartum.

Although not all clinicians agree on the value of vasodilators in vascular disease, several investigators[1-4] have reported favorably on the effects of isoxsuprine. Effects have been demonstrated both by objective measurement[2,4] and observation of clinical improvement.[1,3] **Indications:** Cerebrovascular insufficiency, arteriosclerosis obliterans, diabetic vascular diseases, thromboangiitis obliterans (Buerger's disease), Raynaud's disease, postphlebitic conditions, acroparesthesia, frostbite syndrome and ulcers of the extremities (arteriosclerotic, diabetic, thrombotic). **Composition:** VASODĪLAN tablets, isoxsuprine HCl 10 mg. and 20 mg. **Dosage:** Oral—10 to 20 mg. t.i.d. or q.i.d. **Contraindications and Cautions:** There are no known contraindications to recommended oral dosage. Do not give immediately postpartum or in the presence of arterial bleeding. **Side Effects:** Occasional palpitation and dizziness can usually be controlled by dosage reduction. Complete details available in product brochure from Mead Johnson Laboratories. **References:** 1. Clarkson, I. S., and LePere, D. M.: Angiology *11*:190-192 (June) 1960. 2. Horton, G. E., and Johnson, P. C., Jr.: Angiology *15*:70-74 (Feb.) 1964. 3. Dhrymiotis, A. D., and Whittier, J. R.: Curr. Ther. Res. *4*:124-128 (April) 1962. 4. Whittier, J. R.: Angiology *15*:82-87 (Feb.) 1964.

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MSMS in action

MSMS represents many opinions, types of physicians

(Editor's Note: The following is excerpted from testimony by Doctor Masters before the National Democratic Policy Council Subcommittee on Health.)

By Brooker L. Masters, MD
Chairman, MSMS Council

"The Michigan State Medical Society has an official position recognizing that there are currently many acceptable methods of practicing medicine. Michigan physicians feel that multiple options for the delivery of medical care should remain open to physicians.

"Our nation is great because we do have pluralistic systems of education, agriculture and others. It is appropriate because no single approach will work across our large nation where population densities vary, where cultural values differ, and so many conditions are unique.

"In Michigan today we have solo medical practices, group practices, professional corporations, clinics, hospitals with salaried staffs, hospitals with fee-for-service staffs, and other forms of practice. We believe that each in its own way is contributing to the effective practice of medicine in Michigan. These variations permit the doctor to select the best structure to provide care for his patients.

"Any insistence that medicine be practiced the same in the inner city of Detroit as in my rural community in Western Michigan would be unwise.

"Our Michigan State Medical Society membership spans the whole spectrum of medical doctors —from the medical school professor to the medical researcher to the salaried physician to the fee-for-service solo practitioner. But it is only through the Michigan State Medical Society that the private practitioner has a voice in Michigan.

"As the prime providers of medical care in Michigan, doctors are deeply concerned about the health and medical needs of the people in Michigan. We have 40 active committees which study various medical concerns and we are activists in attacking these problems.

"The medical profession accepts its vital role in this fast-moving evolution toward further improvements. We are dedicated to making available medical care for everybody. We are deeply concerned about the costs of medical care. We are insistent through our many review committees that high professional standards of quality be maintained.

"No country has developed, in the opinion of physicians, a better combination of these three factors—general access, reasonable cost, and high quality."

Judicial Commission has new leaders: Doctors Payne, Mason

The MSMS Judicial Commission, as of its annual election Feb. 16, has new leaders.

They are C. Allen Payne, MD, Grand Rapids, chairman, and Robert J. Mason, MD, Birmingham, vice chairman. Doctor Payne and Doctor Mason are both past presidents of MSMS, with Doctor Mason serving most recently in 1969-70. Doctor Payne is also president of the State Board of Registration in Medicine.

New members of the Judicial Commission are Doctor Mason, George Mogill, MD, Huntington Woods, and Justin L. Sleight, MD, Lansing.

At the first meeting in February of the MSMS Planning and Priorities Committee, Stuart Gould, MD, Ann Arbor, center, took over the chairmanship from Brooker L. Masters, MD, Fremont, right, who is now chairman of The MSMS Council. John J. Ylvisaker, MD, Detroit, left, MSMS treasurer, interpreted Phase II of the Alexander Grant study for the committee members, and several task forces were appointed. Reports on the task forces' activities will appear in future issues of **Michigan Medicine**.

Michigan mediscene

April 12—Child Abuse Conference, sponsored by Michigan chapter, American Academy of Pediatrics and Headstart program of Lansing, at MSU Life Sciences Building, contact: Theresa Haddy, MD, conference chairman, B246A Life Sciences I, MSU, East Lansing, 48823

April 12-13—Annual spring conference, Institute for Study of Mental Retardation and Related Disabilities, Rackham Building, U-M, contact: ISMRRD, the U-M, 611 Church Street, Ann Arbor, 48104

April 13-15—Michigan Heart Association Heart Days, Cobo Hall, Detroit, contact: Harold Arnow, publicity director, MHA, 13100 Puritan, Detroit, 48227

April 19—Woman's Auxiliary to MSMS, Legislative Day, Olds Plaza, Lansing, contact: Mrs. R. J. Westerhoff, 2458 Maplewood, SE, Grand Rapids, 49506

April 19-20—Woman's Auxiliary to MSMS, spring conference, Hospitality Inn, Lansing, contact: Mrs. Charles Schoff, 5209 Sunset Drive, Midland, 48640

April 19-20—Conference on Supportive Therapy for Family Practice, Kellogg Center, East Lansing, sponsored by Michigan Academy of Family Physicians, contact: Joseph V. Fisher, MD, president, MAFP, 116 Park St., Chelsea, 48118

April 23-26—MSU College of Human Medicine Workshop, "The Community: A Base for Undergraduate Medical Education," Park Place Motor Inn, Traverse City, contact: Andrew D. Hunt, Jr., MD, Dean, College of Human Medicine, MSU, East Lansing, 48823

April 26—The Council, MSMS Headquarters, contact: Warren F. Tryloff, director

April 26th—Twelfth annual Clinical Conference, Bronson Methodist Hospital, "Liver Disease for the Clinician," contact: Keith S. Henley, MD, University of Michigan Medical School, University Medical Center, Ann Arbor, 48104

April 27-30—Annual Convention, American Association of Medical Assistants, State of Michigan, Holiday Inn, Crosstown Parkway, Kalamazoo, contact: Mrs. Betty Boers, president, 1116 Sheridan, Kalamazoo, 49001

April 30-May 5—American Nurses Association Biennial Convention, Cobo Hall, Detroit, contact: Miss Virginia Stone, executive director, Detroit district, Michigan Nurses Association, 396 Fisher Bldg., Detroit, 48202

April 28-29—Cancer symposium, Michigan Division, American Cancer Society, and Wayne State University, "Early Carcinoma of the Breast," at the university, contact: Bob Hillcoat, University Relations, WSU, Detroit, 48202

May 7-9—Spring conference, "The Addicted Woman," Michigan Alcohol and Addiction Association, Pantlind Hotel, Grand Rapids, contact: Russell S. McMillan, DrPh, chairman, Conference Planning Committee, MAAA, Box 61, Lansing

May 10-12—Annual meeting, Michigan Public Health Association, Park Place Motor Inn, Traverse City, contact: Ralph Lewis, Department of Postgraduate Medicine, Towsley Center, The University of Michigan, Ann Arbor, 48104

May 13—Annual May Seminar, "Comparative Pathology," Michigan Society of Pathologists, Hurley Hospital, Flint, contact: Jacob E. Briski, MD, Saint John Hospital, 22101 Moross Road, Detroit, 48236

May 13—17th annual all-day scientific meeting, Michigan Society of Anesthesiologists, Sheraton-Cadillac Hotel, Detroit, contact: Ralph E. Bauer, MD, MSA secretary-treasurer, Henry Ford Hospital, Detroit, 48202

May 18-19—Annual Gull Lake meeting, MSMS Committee on Maternal and Perinatal Health, Kellogg Biological Station, Gull Lake, contact: Helen Schulte, MSMS Headquarters

May 18-19—15th Annual Clinnic Days, emphasis "Team Medicine," Children's Hospitals of Michigan and Wayne State University School of Medicine, at the hospital, contact: Larry E. Fleischmann, MD, chairman, 3901 Beaubien, Detroit, 48201

May 19-20—11th annual Kidney Disease Symposium, sponsored by Kidney Foundation of Michigan, at Mercy College Conference Center, Detroit, contact: Sidney Baskin, MD, chairman, 3378 Washtenaw Ave., Ann Arbor, 48104

May 20-27—Michigan Week

May 22-23—National chapter meeting and scientific session, American College of Emergency Physicians, Shanty Creek, Bellaire, contact: Gaius Clark, MD, 865 Pebblebrook Lane, East Lansing, 48823

May 22-23—National Conference on Instrumentation and Hazards in Cardiac Care, Towsley Center, University Medical Center, Ann Arbor, sponsored by Council on Clinical Cardiology of the American Heart Association and the Michigan Heart Association, contact: Harold Arnow, public information director, MHA, P.O. Box L-V 160, Southfield, 48076

May 24-26—Annual Medical Staff-Trustee-Administrator Forum, sponsored by Michigan Hospital Association, Boyne Mountain Lodge, Boyne Falls, contact: Frank A. Drazkowski, Administrator, Grand View Hospital, US 2, Ironwood, 49938

May 31-June 3—Continuing Medical Education course on "Treatment of the Seriously Injured or Ill in the Emergency Department," American College of Surgeons Committee on Trauma, in Detroit, contact: Oscar P. Hampton, Jr., MD, Director of Trauma Division, ACS, 55 E. Erie St., Chicago, 60611

June 2-3—Gaylord Trauma Day, Hidden Valley Otsego Ski Club, Gaylord, contact: Benjamin Henig, MD, Keyport Clinic, 308 Michigan Ave., Grayling, 59738

June 5-6—Annual Spring Mental Health Meeting, Kellogg Center, MSU, contact: Bruce Alderman, conference consultant for medical continuing education, Continuing Education Service, MSU, East Lansing, 48823

June 5-7—Initial Management of the Acutely Ill and Injured Patient, Ann Arbor, contact: Charles F. Frey, MD, Department of Surgery, University of Michigan Medical Center, Ann Arbor, 48104

June 7—The Council, MSMS Headquarters, contact: Warren F. Tryloff, Director

June 18-22—Many Michigan physicians will attend AMA Annual Convention in San Francisco

June 23-24—Annual Meeting, Upper Peninsula Medical Society, Holiday Inn, Marquette, contact: Thomas B. Bolitho, MD, UPMS president, 1414 W. Fair Ave., Marquette, 49855

June 26-29—International Symposium on Clinical Aspects of Metabolic Bone Disease, Henry Ford Hospital, contact: Boy Frame, MD, Henry Ford Hospital, Detroit, 48202

June 26-30—American College of Physicians, Conference on Medical Interviewing, Kellogg Center, MSU, contact: Allen Enelow, MD, chairman, Department of Psychiatry, MSU, East Lansing 48823

July 9-14—Continuing Education Course, "Consultation Skills,"—U-M School of Public Health, Weber's Inn, Ann Arbor, contact: Anna B. Brown, PhD, M4234 School of Public Health II, the U-M, Ann Arbor, 48104

July 15-19—26th Annual Postgraduate Scientific Assembly of Michigan Academy of Family Physicians, Boyne Highlands, Harbor Springs, contact: George Hoekstra, MD, chairman, 100 Maple St. Parchment, 49004

July 23-28—Continuing Education Course, "Community and Professional Relations," sponsored by U-M School of Public Health, Weber's Inn, Ann Arbor, contact: Anna B. Brown, PhD, M4234 School of Public Health II, the U-M, Ann Arbor, 48104

July 27-28—Coller - Penberthy - Thirlby Conference, Park Place Motor Inn, Traverse City, contact: L. P. Skendzel, MD, Traverse City, chairman

Oct. 1 and 4—The Council, Sheraton-Cadillac Hotel, Detroit, contact: Warren F. Tryloff, Director

Oct. 1-5—107th Annual Session of the Michigan State Medical Society, Sheraton-Cadillac Hotel, Detroit, contact: Richard Campau, MSMS Headquarters, Box 950, East Lansing, 48823

Nov. 8—The Council, special meeting, noon, MSMS Headquarters, contact: Warren F. Tryloff, Director

Dec. 6—The Council, MSMS Headquarters, contact: Warren F. Tryloff, Director

MSMS will soon survey your priorities, Doctor

Work is underway by the MSMS staff, under the direction of the Bureau of Economic Information, to design a survey of MSMS members' attitudes toward key medical issues in Michigan, such as abortion law reform, chiropractic, malpractice insurance, care of Medicaid recipients and mandatory recertification.

First review of proposed questions for the survey will be made by The MSMS Council this spring.

The action is being taken at the direction of a 1971 MSMS House of Delegates resolution.

Pre-Sate®
(chlorphentermine HCl)

CAUTION: Federal law prohibits dispensing without prescription.

Indications: Pre-Sate (chlorphentermine hydrochloride) is indicated in exogenous obesity, as a short term (*i.e.*, several weeks) adjunct in a regimen of weight reduction based upon caloric restriction.

Contraindications: Glaucoma, hyperthyroidism, pheochromocytoma, hypersensitivity to sympathomimetic amines, and agitated states. Pre-Sate (chlorphentermine hydrochloride) is also contraindicated in patients with a history of drug abuse or symptomatic cardiovascular disease of the following types: advanced arteriosclerosis, severe coronary artery disease, moderate to severe hypertension, or cardiac conduction abnormalities with danger of arrhythmias. The drug is also contraindicated during or within 14 days following administration of monamine oxidase inhibitors, since hypertensive crises may result.

Warnings: When weight loss is unsatisfactory the recommended dosage should not be increased in an attempt to obtain increased anorexigenic effect; discontinue the drug. Tolerance to the anorectic effect may develop. Drowsiness or stimulation may occur and may impair ability to engage in potentially hazardous activities such as operating machinery, driving a motor vehicle, or performing tasks requiring precision work or critical judgment. Therefore, such patients should be cautioned accordingly. Caution must be exercised if Pre-Sate (chlorphentermine hydrochloride) is used concomitantly with other central nervous system stimulants. There have been reports of pulmonary hypertension in patients who received related drugs.

Drug Dependence: Drugs of this type have a potential for abuse. Patients have been known to increase the intake of drugs of this type to many times the dosages recommended. In long-term controlled studies with high dosages of Pre-Sate, abrupt cessation did not result in symptoms of withdrawal.

Usage In Pregnancy: The safety of Pre-Sate (chlorphentermine hydrochloride) in human pregnancy has not yet been clearly established. The use of anorectic agents by women who are or who may become pregnant, and especially those in the first trimester of pregnancy, requires that the potential benefit be weighed against the possible hazard to mother and child. Use of the drug during lactation is not recommended. Mammalian reproductive and teratogenic studies with high multiples of the human dose have been negative.

Usage In Children: Not recommended for use in children under 12 years of age.

Precautions: In patients with diabetes mellitus there may be alteration of insulin requirements due to dietary restrictions and weight loss. Pre-Sate (chlorphentermine hydrochloride) should be used with caution when obesity complicates the management of patients with mild to moderate cardiovascular disease or diabetes mellitus, and only when dietary restriction alone has been unsuccessful in achieving desired weight reduction. In prescribing this drug for obese patients in whom it is undesirable to introduce CNS stimulation or pressor effect, the physician should be alert to the individual who may be overly sensitive to this drug. Psychologic disturbances have been reported in patients who concomitantly receive an anorexic agent and a restrictive dietary regimen.

Adverse Reactions: Central Nervous System: When CNS side effects occur, they are most often manifested as drowsiness or sedation or overstimulation and restlessness. Insomnia, dizziness, headache, euphoria, dysphoria, and tremor may also occur. Psychotic episodes, although rare, have been noted even at recommended doses. **Cardiovascular:** tachycardia, palpitation, elevation of blood pressure. **Gastrointestinal:** nausea and vomiting, diarrhea, unpleasant taste, constipation. **Endocrine:** changes in libido, impotence. **Autonomic:** dryness of mouth, sweating, mydriasis. **Allergic:** urticaria. **Genitourinary:** diuresis and, rarely, difficulty in initiating micturition. **Others:** Paresthesias, sural spasms.

Dosage and Administration: The recommended adult daily dose of Pre-Sate (chlorphentermine hydrochloride) is one tablet (equivalent to 65 mg chlorphentermine base) taken after the first meal of the day. Use in children under 12 not recommended.

Overdosage: Manifestations: Restlessness, confusion, assaultiveness, hallucinations, panic states, and hyperpyrexia may be manifestations of acute intoxication with anorectic agents. Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension, or hypotension and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Fatal poisoning usually terminates in convulsions and coma.

Management: Management of acute intoxication with sympathomimetic amines is largely symptomatic and supportive and often includes sedation with a barbiturate. If hypertension is marked, the use of a nitrate or rapidly acting alpha-receptor blocking agent should be considered. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendations in this regard.

How Supplied: Each Pre-Sate (chlorphentermine hydrochloride) tablet contains the equivalent of 65 mg chlorphentermine base; bottles of 100 and 1000 tablets.

Full information available on request.

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Division, Warner-Lambert Company
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for the practical generation Pre-Sate®

(chlorphentermine HCl)

the trend is toward our kind of anorectic

Not a controlled drug under the Comprehensive Drug Abuse Prevention and Control Act

- low potential for abuse
- less CNS stimulation than with d-amphetamine or phenmetrazine

Effective anorectic adjunct to your program of caloric restriction and diet re-education

- weight loss comparable to d-amphetamine and phenmetrazine, superior to placebo
- convenient one-a-day dosage

GP-21-B/W

Pre-Sate® (chlorphentermine HCl)...the increasingly practical appetite suppressant

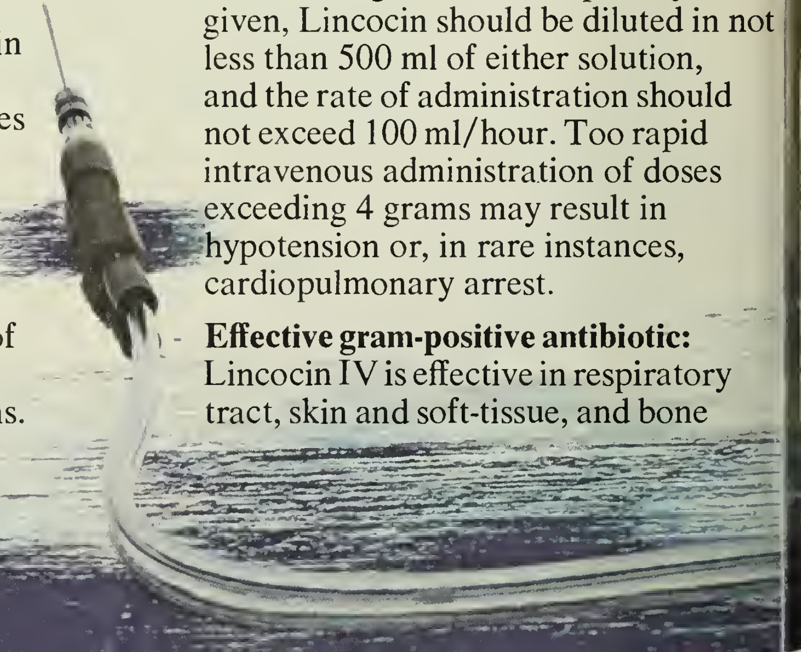
When you select this familiar antibiotic for IV infusion you have available a broad dosage range that hospitalized patients may need.

Intravenous Lincocin (lincomycin hydrochloride, Upjohn), with its 1.2 to 8 grams/day dosage range, covers many serious and even life-threatening infections. Lincocin is effective in infections due to susceptible strains of streptococci, pneumococci, and staphylococci. Lincocin IV therefore can be as useful in your hospitalized patients as its IM use has proved to be in your office patients. As with all antibiotics, *in vitro* susceptibility studies should be performed.

1.2 to 8 grams/day IV dosage range: Most hospitalized patients with uncomplicated pneumonias respond satisfactorily to 1.2 to 1.8 grams/day of Lincocin IV. These doses may have to be increased for more serious infections. In life-threatening situations as much as 8 grams/day has been administered intravenously to adults.

In usual IV doses, Lincocin (lincomycin hydrochloride, Upjohn) should be diluted in 250 ml or more of normal saline solution or 5% glucose in water. But when 4 grams or more per day is given, Lincocin should be diluted in not less than 500 ml of either solution, and the rate of administration should not exceed 100 ml/hour. Too rapid intravenous administration of doses exceeding 4 grams may result in hypotension or, in rare instances, cardiopulmonary arrest.

Effective gram-positive antibiotic: Lincocin IV is effective in respiratory tract, skin and soft-tissue, and bone



infections caused by susceptible strains of pneumococci, streptococci, and staphylococci, including penicillin-resistant strains. Staphylococcal strains resistant to Lincocin (lincomycin hydrochloride, Upjohn) have been recovered. Before initiating therapy, culture and susceptibility studies should be performed. Lincocin has proved valuable in treating patients hypersensitive to penicillin or cephalosporins, since Lincocin does not share antigenicity with these compounds. However, hypersensitivity reactions have been reported, some of these in patients known to be sensitive to penicillin.

Well tolerated at infusion site: Lincocin intravenous infusions have not produced local irritation or phlebitis, when given as recommended. Lincocin is usually well tolerated in patients who are hypersensitive to other drugs. Nevertheless, Lincocin should be used cautiously in patients with asthma or significant allergies.

In patients with impaired renal function, the recommended dose of Lincocin should be reduced to 25–30% of the dose for patients with normal kidney function. Its safety in pregnant patients and in infants less than one month of age has not been established.

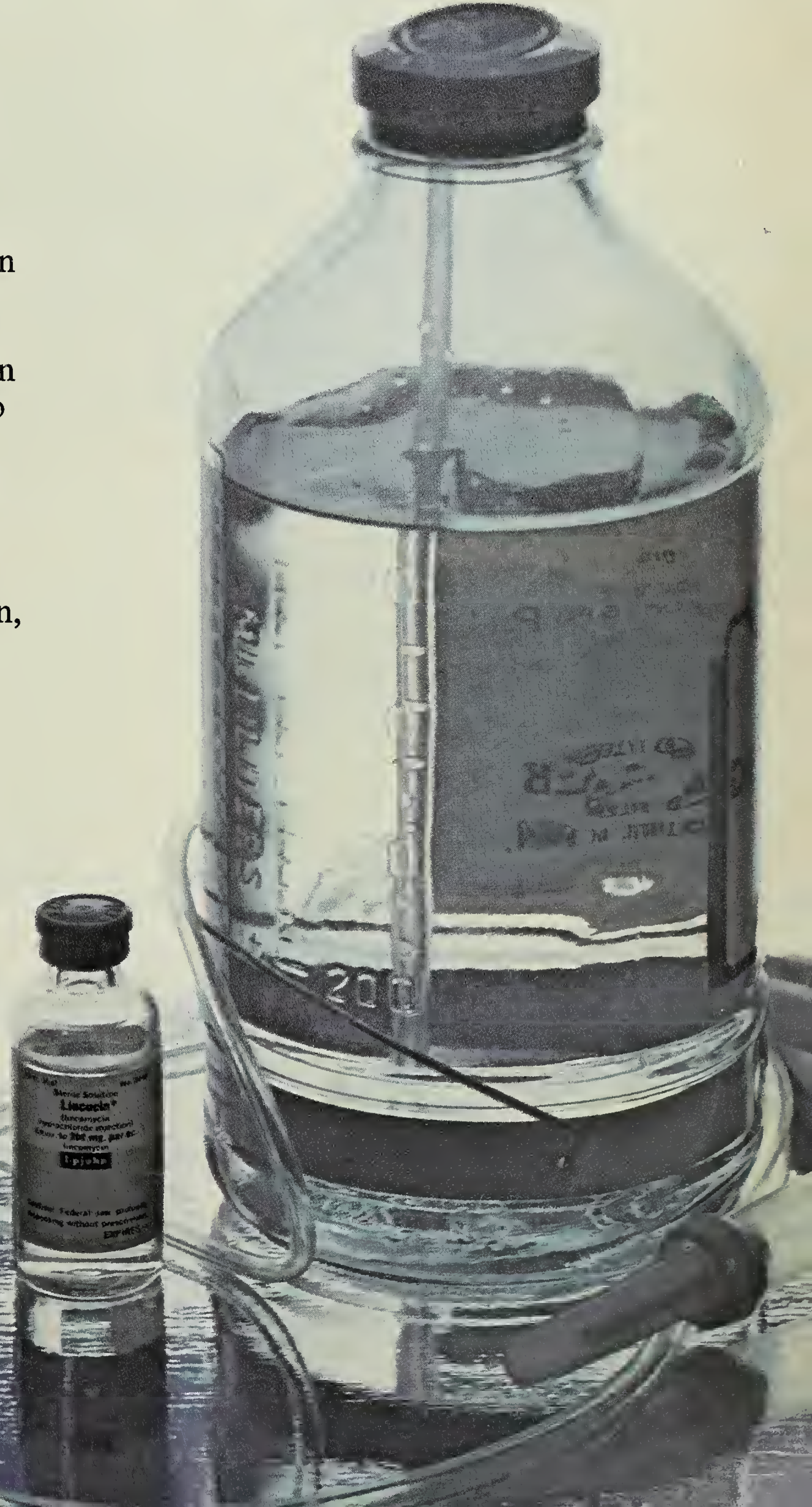
Lincocin may be used with other antimicrobial agents: Since Lincocin is stable over a wide pH range, it is suitable for incorporation in intravenous infusions; it also may be administered concomitantly with other antimicrobial agents when indicated. However, Lincocin should not be used with erythromycin, as *in vitro* antagonism has been reported.

Lincocin®

Sterile Solution (300 mg per ml)

(lincomycin hydrochloride, Upjohn)

For further prescribing information, please see following page.



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Sterile Solution (300 mg. per ml.)

Lincocin®

(lincomycin hydrochloride, Upjohn)

Up to 8 grams per day by IV infusion for hospitalized patients with life-threatening infections. Lincocin is effective in infections due to susceptible strains of streptococci, pneumococci, and staphylococci. As with all antibiotics, *in vitro* susceptibility studies should be performed.

Each preparation contains:	Lincomycin hydrochloride monohydrate equivalent to lincomycin base
250 mg Pediatric Capsule	250 mg
500 mg Capsule	500 mg
*Sterile Solution per 1 ml	300 mg
Syrup per 5 ml	250 mg

*Contains also: Benzyl Alcohol 9 mg; and, Water for Injection—q.s.

Lincocin (lincomycin hydrochloride) is indicated in infections due to susceptible strains of staphylococci, pneumococci, and streptococci. *In vitro* susceptibility studies should be performed. Cross resistance has not been demonstrated with penicillin, ampicillin, cephalosporins, chloramphenicol or the tetracyclines. Some cross resistance with erythromycin has been reported. Studies indicate that Lincocin does not share antigenicity with penicillin compounds.

CONTRAINDICATIONS: History of prior hypersensitivity to lincomycin or clindamycin. Not indicated in the treatment of viral or minor bacterial infections.

WARNINGS: *CASES OF SEVERE AND PERSISTENT DIARRHEA HAVE BEEN REPORTED AND HAVE AT TIMES NECESSITATED DISCONTINUANCE OF THE DRUG. THIS DIARRHEA HAS BEEN OCCASIONALLY ASSOCIATED WITH BLOOD AND MUCUS IN THE STOOLS AND HAS AT TIMES RESULTED IN AN ACUTE COLITIS. THIS SIDE EFFECT USUALLY HAS BEEN ASSOCIATED WITH THE ORAL DOSAGE FORM BUT OCCASIONALLY HAS BEEN REPORTED FOLLOWING PARENTERAL THERAPY.* A careful inquiry should be made concerning previous sensitivities to drugs or other allergens. Safety for use in pregnancy has not been established and Lincocin (lincomycin hydrochloride) is not indicated in the newborn. Reduce dose 25 to 30% in patients with severe impairment of renal function.

PRECAUTIONS: Like any drug, Lincocin should be used with caution in patients having a history of asthma or significant allergies. Overgrowth of nonsusceptible organisms, particularly yeasts, may occur and require appropriate measures. Patients with pre-existing monilial infections requiring Lincocin therapy should be given concomitant antimonilial treatment. During prolonged Lincocin therapy, periodic liver function studies and blood counts should be performed. Not recommended (inadequate data) in patients with pre-existing liver disease unless special clinical circumstances indicate. Continue treatment of β-hemolytic streptococci infections for 10 days to diminish likelihood of rheumatic fever or glomerulonephritis.

ADVERSE REACTIONS: *Gastrointestinal*—Glossitis, stomatitis, nausea, vomiting. Persistent diarrhea, enterocolitis, and pruritus ani. *Hemopoietic*—Neutropenia, leukopenia, agranulocytosis, and thrombocytopenic purpura have been reported. *Hypersensitivity reactions*—Hypersensitivity reactions such as angioneurotic edema, serum sickness, and anaphylaxis have been reported, sometimes in patients sensitive to penicillin. If allergic reaction occurs, discontinue drug. Have epinephrine, corticosteroids, and antihistamines available for emergency treatment *Skin and mucous membranes*—Skin rashes urticaria, vaginitis, and rare instances of exfoliative and vesiculobullous dermatitis have been reported. *Liver*—Although no direct relationship to liver dysfunction is established jaundice and abnormal liver function tests (particularly serum transaminase) have been observed in a few instances. *Cardiovascular*—Instances of hypotension following parenteral administration have been reported particularly after too rapid IV administration. Rare instances of cardiopulmonary arrest have been reported after too rapid IV administration. If 4.0 grams or more administered IV, dilute in 500 ml of fluid and administer no faster than 100 ml per hour *Special senses*—Tinnitus and vertigo have been reported occasionally. *Local reactions*—Excellent local tolerance demonstrated to intramuscularly administered Lincocin (lincomycin hydrochloride). Reports of pain following injection have been infrequent. Intravenous administration of Lincocin in 250 to 500 ml of 5% glucose in distilled water or normal saline has produced no local irritation or phlebitis.

HOW SUPPLIED: *250 mg* and *500 mg* Capsules—bottles of 24 and 100. *Sterile Solution, 300 mg per ml*—2 and 10 ml vials and 2 ml syringe. *Syrup, 250 mg per 5 m*—60 ml and pint bottles.

For additional product information, consult the package insert or see your Upjohn representative.

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Kalamazoo, Michigan 49001

Upjohn

140/90 is normal blood pressure...or is it?

An extensive study based on nearly 4 million life insurance policies suggests that a blood pressure reading of 140/90 requires close medical supervision.

The Build
and
Blood Pressure
Study

Study Findings. Twelve years ago the Society of Actuaries reported on an extensive study based on the lives and deaths represented by almost 4 million life insurance policies. From this vast survey—"The Build and Blood Pressure Study"[1]—insurance experts concluded that:

- Blood pressure above 140/90 is accompanied by increased morbidity and requires close medical attention.
- Even small increments in either systolic or diastolic blood pressure progressively and steeply shorten life expectancy.

Other Studies. Studies conducted with large numbers of patients since that time have echoed the above findings. Two studies published in 1970—the VA Cooperative Study Group on "Effects of Treatment on Morbidity in Hypertension"[2] and the "Framingham Study"[3]—suggest that treatment of even mild hypertension may, over time, offer significant benefits to the patient.

Another Point of View. Although a growing body of studies suggests that treatment of mild hypertension is warranted, medical opinion is not unanimous. Some clinicians recommend that drug treatment for mild hypertension be reserved for patients with additional risk factors such as smoking, high cholesterol levels, heart or kidney involvement, or a family history of vascular disease. Dr. Walter M. Kirkendall stated this position in his recent paper "What's With Hypertension These Days?"[4] Discussing the management of hypertension in patients with a sustained diastolic pressure up to 100 mm Hg, he said: "Generally, I do not recommend antihypertensive therapy unless patient's blood pressure approaches the upper limit for the group and a number of adverse factors exist, such as male sex, family history of vascular disease, youth, evidence of heart or kidney involvement."

Drug Therapy for Hypertension. Although opinion varies on when to start drug therapy for mild hypertension, many physicians agree that treatment should start with a thiazide diuretic such as HydroDIURIL. For the adult patient, the usual starting dosage is 50 mg b.i.d. Dosage adjustments are recommended as the patient responds to treatment. The patient whose therapy begins with HydroDIURIL frequently can continue to benefit from it, because HydroDIURIL usually maintains its antihypertensive effect even when therapy is prolonged.

MSD
MERCK
SHARP&
DOHME

25- and 50-mg tablets

HydroDIURIL®

(Hydrochlorothiazide|MSD)

Therapy to Start With

For a brief summary of prescribing information, please see next page.

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1. Society of Actuaries, *The Build and Blood Pressure Study*, 1959.
2. Veterans Administration Cooperative Study Group on Antihypertensive Agents, "Effects of Treatment on Morbidity in Hypertension," JAMA *213*:1143-1152, Aug. 17, 1970.
3. Kannel, William B., *et al.*: "Epidemiologic Assessment of the Role of Blood Pressure in Stroke—The Framingham Study," JAMA *214*:301-310, Oct. 12, 1970.
4. Kirkendall, Walter M.: "What's With Hypertension These Days?" Consultant, Jan. 1971.

25- and 50-mg tablets

HydroDIURIL®

(Hydrochlorothiazide|MSD)

Therapy to Start With

Drug Therapy for Hypertension. Although opinion varies on when to start drug therapy for mild hypertension, many physicians agree that treatment should start with a thiazide diuretic such as HydroDIURIL. For the adult patient, the usual starting dosage is 50 mg b.i.d. Dosage adjustments are recommended as the patient responds to treatment. The patient whose therapy begins with HydroDIURIL frequently can continue to benefit from it, because HydroDIURIL usually maintains its antihypertensive effect even when therapy is prolonged.

CONTRAINDICATIONS: Anuria; increasing azotemia and oliguria during treatment of severe progressive renal disease. Known sensitivity to this compound. Nursing mothers; if use of drug is deemed essential, patient should stop nursing.

WARNINGS: May precipitate or increase azotemia. Use special caution in impaired renal function to avoid cumulative or toxic effects. Minor alterations of fluid and electrolyte balance may precipitate coma in hepatic cirrhosis.

When used with other antihypertensive drugs, careful observation for changes in blood pressure must be made, especially during initial therapy. Dosage of other antihypertensive agents, especially ganglion blockers, must be reduced by at least 50% because HydroDIURIL potentiates their action.

Stenosis and ulceration of the small bowel causing obstruction, hemorrhage, and perforation have been reported with the use of enteric-coated potassium tablets, either alone or with nonenteric-coated thiazides. Surgery was frequently required, and deaths have occurred. Such formulations should be used only when indicated and when dietary supplementation is impractical. Discontinue immediately if abdominal pain, distention, nausea, vomiting, or gastrointestinal bleeding occurs.

Thiazides cross placenta and appear in cord blood. In women of childbearing age, potential benefits must be weighed against possible hazards to fetus, such as fetal or neonatal jaundice, thrombocytopenia, and possibly other adverse reactions which have occurred in the adult.

The possibility of sensitivity reactions should be considered in patients with a history of allergy or bronchial asthma. The possibility of exacerbation or activation of systemic lupus erythematosus has been reported for sulfonamide derivatives, including thiazides.

PRECAUTIONS: Check for signs of fluid and electrolyte imbalance, particularly if vomiting is excessive or patient is receiving parenteral fluids. Warning signs, irrespective of cause, are dryness of mouth, thirst, weakness, lethargy, drowsiness, restlessness, muscle pains or cramps, muscular fatigue, hypotension, oliguria, tachycardia, and gastrointestinal disturbances. Hypokalemia may develop (especially with brisk diuresis) in severe cirrhosis; with concomitant steroid or ACTH therapy; or with inadequate electrolyte intake. Digitalis therapy may exaggerate metabolic effects of hypokalemia, especially with reference to myocardial activity. Hypokalemia may be avoided or treated by use of potassium chloride or giving foods with a high potassium content. Similarly, any chloride deficit may be corrected by use of ammonium chloride (except in patients with hepatic disease) and largely prevented by a near normal salt intake. Hypochloremic alkalosis occurs infrequently and is rarely severe. In severely edematous patients with congestive failure or renal disease, a low salt syndrome may occur if dietary salt is unduly restricted, especially during hot weather.

Thiazides may increase responsiveness to tubocurarine. The antihypertensive effect of the drug may be enhanced in the postsympathectomy patient. Arterial responsiveness to norepinephrine is decreased, necessitating care in surgical patients. Discontinue drug 48 hours before elective surgery. Orthostatic hypotension may occur and may be potentiated by alcohol, barbiturates, or narcotics.

Pathological changes in the parathyroid glands with hypercalcemia and hypophosphatemia have been seen in a few patients on prolonged thiazide therapy. The effect of discontinuing thiazide therapy on serum calcium and phosphorus levels may be helpful in assessing the need for parathyroid surgery in such patients. Parathyroidectomy has elicited subjective clinical improvement in most patients, but has no effect on hypertension. Thiazide therapy may be resumed after surgery.

Use cautiously in hyperuricemic or gouty patients; gout may be precipitated. May affect insulin requirements in diabetics; may induce hyperglycemia and glycosuria in latent diabetics.

ADVERSE REACTIONS: Rare reactions include thrombocytopenia, leukopenia, agranulocytosis, aplastic anemia, cholestasis, and pericholangiolitic hepatitis. Nausea, vomiting, diarrhea, dizziness, vertigo, paresthesias, transient blurred vision, sialadenitis, purpura, rash, urticaria, photosensitivity, or other hypersensitivity reactions may occur. Cutaneous vasculitis precipitated by thiazide diuretics has been reported in elderly patients on repeated and continuing exposure to several drugs. Scattered reports have linked thiazides to pancreatitis, xanthopsia, neonatal thrombocytopenia, and neonatal jaundice. When adverse reactions are moderate or severe, the dosage of thiazides should be reduced or therapy withdrawn.

For more detailed information, consult your MSD Representative or see the Direction Circular. Merck Sharp & Dohme, Division of Merck & Co., Inc., West Point, Pa. 19486

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An HMO in your future?

How six special programs deliver health care in Michigan

During the past several months, Herbert Mehler, chief of research and analysis for the MSMS Department of Government Relations, has conducted a series of on-site visits to clinics and centers in Michigan delivering different types of health care.

Here Mr. Mehler continues his reports.

(Third in a series.)

Visits were made to six centers which included an HMO-type clinic under State contract, a fee-for-service group practice in both suburban and the inner city and a Government-subsidized clinic in a rural setting.

Knowledge about these various organizations is designed to enable physicians to individually determine if they wish to remain in solo, partnership or corporate practice or accept the option of participating in a prepaid group practice/health maintenance organization (HMO) program.

Here is a brief resume of these medical-providing structures.

1. **Detroit Medical and Surgical Center**
An incorporated fee-for-service clinic providing medical and health care to inner city residents including Medicare, Medicaid and BC/BS recipients. Federal and private foundation funding permitted center to employ full-time and part-time salaried physicians including necessary paramedical personnel. Awarded grant to investigate feasibility of structuring an HMO.
2. **Gratiot Family Health Center**
This facility in Alma is under the auspices of the East Central Michigan Health Service. Federal funding was granted to provide year-round services for treatment of non-acute illnesses and injuries and to administer preventive immunizations. Migrant agricultural workers and rural and urban residents are eligible for services commensurate with a sliding scale for financial contribution. Persons with little or no funds either contribute nothing or a nominal fee of fifty cents (50¢) per visit. One full-time, a part-time and other physicians (MD-DO) agreed to provide treatment at the center at an hourly rate or receive fee-for-service when treating patients in offices. Health, Education and Welfare selected this project to be a community learning laboratory to determine if providers, community workers and lay citizens can successfully operate a program of this type.
3. **Woodland Medical Group, Inc. P.C.**
This professional corporation is a vested, private practice without government funding. It provides medical and health services to Medicare, Medicaid, BC/BS, V.A. and CHAMPUS eligibles. The group employs full-time multi-specialty physicians on a yearly salary with the opportunity to share in any surpluses after a year's service. Currently negotiating with Social Services for contracting services to a defined group of Medicaid eligibles.
4. **Western Michigan Comprehensive Health Services**
This facility provides direct medical, health, home, mental, environmental, social, educational and economic services. Five full-time salaried physicians are employed plus necessary paramedical, social and community

Lansing Model Cities Director Jacqueline Warr gives MSMS staffer Herb Mehler an update on the health care goals and current clinic set-up of her program, one of those studied by Mr. Mehler on his series of visits.

workers. An employee training program is available to up-grade health and other skilled positions. Satellite clinics throughout the area are utilized to provide dental, medical, alcoholic and family services.

5. **Model Neighborhood Comprehensive Health Program, Inc.**
   This Detroit inner-city facility recently contracted with Social Services to provide comprehensive medical health services to 10,000 Group One Medicaid recipients within the target area. This unique demonstration project could be the model for providing similar services throughout Michigan. Full and part-time physicians and consultants are salaried employees providing a comprehensive scope of benefits. A Citizen's Government Board and Health Council played an important role in devising this program.

6. **Community Health Association**
   The Boards of Michigan BC/BS/CHA agreed on a new Metropolitan Program. If successful, the development of a variety of prepaid group practice programs in other parts of the State of Michigan is expected with the objective of broadening the availability of a variety of medical care delivery methods. This insurance program provides comprehensive, preventive, emergency medical and health services in hospitals and five satellite clinics.

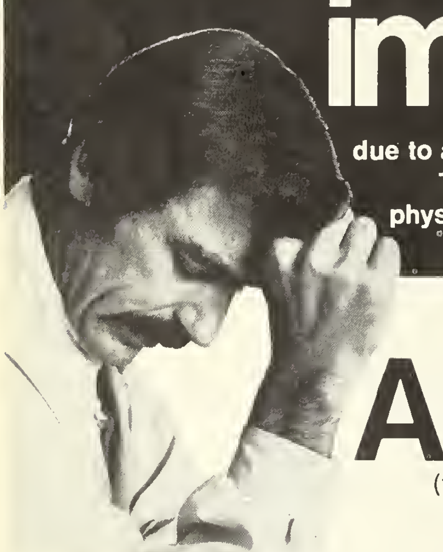
Many other neighborhood and community health programs are emerging. They will be monitored by MSMS staff to provide progress reports on a periodic basis.

Manistique has new, private medical center

The city of Manistique in Schoolcraft County in the Upper Peninsula is boasting a new medical-dental center constructed to upgrade the county medical facilities and to attract new physicians to the region.

The privately-owned center is located on private property adjacent to the Schoolcraft Memorial Hospital, which in turn is next to the Schoolcraft Medical Care Facility.

The center's 18,000 square feet include five suites for general practitioners, two dental suites, one oral surgery suite, a coffee shop, a hospital pharmacy, medical records and hospital administration offices.



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References: 1. **Montesano, P., and Evangelista, I.** Methyltestosterone-thyroid treatment of sexual impotence. Clin Med 12:69, 1966. 2. **Dublin, M. F.** Treatment of impotence with methyltestosterone-thyroid compound. West Med 5:67, 1964. 3. **Titeff, A. S.** Methyltestosterone-thyroid in treating impotence. Gen Prac 25:6, 1962. 4. **Hellman, L., Bradlow, H. L., Zumoff, B., Fukushima, D. K., and Gallagher, T. F.** Thyroid-androgen interrelations and the hypocholesteremic effect of androsterone. J Clin Endocr 19:936, 1959. 5. **Farris, E. J., and Colton, S. W.** Effects of L-thyroxine and liothyronine on spermatogenesis. J Urol 79:863, 1958. 6. **Osol, A., and Farrar, G. E.** United States Dispensatory (ed. 25), Lippincott, Philadelphia, 1955, p. 1432. 7. **Wershub, L. P.** Sexual Impotence in the Male, Thomas, Springfield, Ill., 1959, pp. 79-99.

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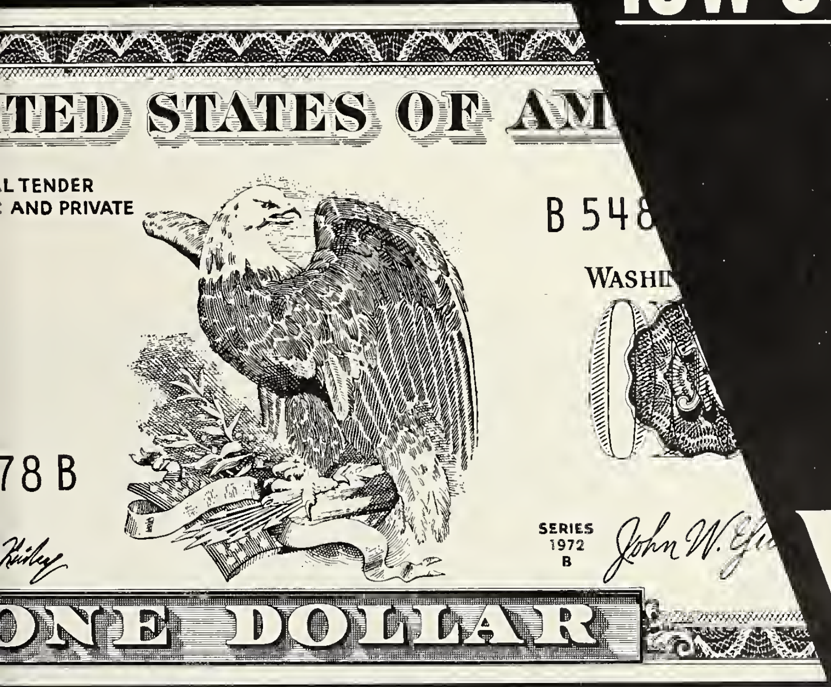
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MSMS takes active legislative role

The City Club of Lansing was the setting of an important meeting between MSMS leaders and members of the Subcommittee on Social Services of the House Appropriations Committee. Bruce W. Ambrose, manager, MSMS Department of Government Relations, standing center, opened the meeting. Following the discussion by the 12 persons present, the subcommittee recommended to the House Medicaid legislation with full pay for all providers.

New member Leonard R. Howard, MD, Battle Creek, left, was welcomed to the Committee on Governmental Medical Care Programs by chairman Robert E. Rice, MD, Greenville, second from right, and D. Bonta Hiscoe, MD, Lansing, committee member.

Key persons involved in the meeting with the Subcommittee on Social Services were, from left, Charles C. Vincent, MD, Detroit, Metropolitan representative; Thomas R. Berglund, MD, Kalamazoo, representing Michigan's medium-sized cities; Rep. Raymond C. Kehres, subcommittee chairman; Rep. James Farnsworth, Republican vice chairman of the House Appropriations Committee, and Robert E. Rice, MD, Greenville, representing Michigan's rural areas.

"The history of science, and in particular the history of medicine . . . is . . . the history of man's reactions to the truth, the history of the gradual revelation of truth, the history of the gradual liberation of our minds from darkness and prejudice."

– George Sarton, from "The History of Medicine Versus the History of Art"

Should nongovernment scientists and physicians play a role in drug regulation?

Opinion

Results of a questionnaire to 7000 physicians:

82.8%
Physicians should play a role

78.3%
Independent scientists should play a role

69.8%
Medical academicians should play a role

Opinion & Dialogue

Dialog

Should nongovernment scientists and physicians play a role in drug regulation?

Doctor of Medicine

Herbert L. Ley, Jr., M.D., M.P.H., Formerly Commissioner, F.D.A. (1968-1969) Currently Medical Consultant

In order for drug regulation to be effective, participation in the regulatory process from nongovernment physicians and scientists must be encouraged. Without such involvement, there will continue to be a high degree of controversy surrounding any regulations promulgated by the Food and Drug Administration.

There are two areas in which participation and communication by nongovernment physicians and scientists could significantly improve the process of regulation. First, scientists and physicians throughout the country could become involved in consulting relationships with the Food and Drug Administration in important scientific areas while regulatory policies are being evolved. If nongovernment professionals could bring their expertise and experience to bear early in the decision-making process, they would have less reason to criticize the final outcome.

Secondly, practicing physicians, academic physicians, and academic-based scientists could make it their business to comment on proposed regulations appearing in the Federal Register. Ideally, a system could be instituted whereby medical, scientific and technical people could see the Federal Register regularly, and provide the Food and Drug Administration with a body of opinion that has so far gone unheard. The FDA is caught among pressures from industry, Congress, the Presidential Administration and consumers. It should also feel pressures from practicing physicians and scientists.

In order to become more involved in these stages of the drug regulatory process, nongovernment physicians and scientists should begin to exercise their influence through their respective professional organizations, state and national medical societies, and specialty groups. Logically, a letter from these organizations representing a collective opinion has far greater weight in the regulatory process than individual letters. If the Food and Drug Administration receives opinions from these organizations early, before a regulation gets into the Federal Register, they are in a good position to respond with further study and review. Without such dissenting opinions, there is very little incentive to make changes in proposed regulations.

One instance in which practitioners did influence drug regulatory affairs in this way is the recent controversy that arose over the legitimacy of drug combinations. The strong opinion of practitioners on the value of such medication in clinical practice played a very prominent role in making the Food and Drug Administration modify its rather restrictive policy.

Another way in which practitioners can effectively influence drug regulations is by working with drug manufacturers conducting clinical trials of chemotherapeutic agents. When a drug is rated other than effective it may only mean that there is a lack of controlled clinical evidence as to efficacy. Thus, physicians might offer to conduct clinical studies that could help keep a truly effective drug in the marketplace. The treatment of diseases such as diabetes and angina are areas where the practitioner can aid in clinical studies because patients suffering from these diseases are rarely found in the conventional hospital setting.

By working with ethically and scientifically sound study designs in his everyday practice, the practitioner could begin to play an important part in determining official ratings on drug efficacy.

Nongovernment physicians and scientists and the FDA should also improve their lines of communication to the public. The medical community must develop a voice every bit as loud as that of the consumerists, the press, and others who sometimes criticize without complete information. If not, much of what the medical community *and* federal regulators do will often be represented in simplistic and somewhat misleading terms.

One illustration of the misuse of the media in this regard is the recall of anticoagulant drugs several years ago. This FDA action was given publicity by the press and television that went far beyond its probable importance. The result was a very uncomfortable situation for the practitioner who had patients taking these medications. Since the practitioner and pharmacist had not been informed of the action by the time it was publicized, in most states they were deluged with calls from worried patients.

The practitioner can attempt to solve these problems of inadequate communication in several ways. One would be the creation of a communications line in state pharmacy societies. When drug regulation news is to be announced, the society could immediately distribute a message to every pharmacist in the state. The pharmacist, in turn, could notify the physicians in his local community so that he and the physician could be prepared to answer inquiries from patients. Another approach would be to use professional publications the practitioner receives.

All of this leads back to my opening contention: if drug regulation is to be effective, timely, and related to the realities of clinical practice, a better method of communication and feedback must be developed between the nongovernmental medical and scientific communities and the regulatory agency.

ue

Maker of Medicine

Henry W. Gadsden,
Chairman & Chief Executive Officer, Merck & Co., Inc.

In my opinion, it is the responsibility of all physicians and medical scientists to take whatever steps they think are desirable in a law- and regulation-making process that can have far-reaching impact on the practice of medicine. Yet many events in the recent past indicate that this is not happening. For example, it is apparent from drug efficacy studies that the NAS/NRC panels gave little consideration to the evidence that could have been provided by practicing physicians.

There are several current developments that should increase the concern of practicing physicians about drug regulatory affairs. One is the proliferation of malpractice claims and litigation. Another is the effort by government to establish the relative efficacy of drugs. This implies that if a physician prescribes a drug other than the "established" drug of choice, he may be accused of practicing something less than first-class medicine. It would come perilously close to federal direction of how medicine should be practiced.

In order to minimize this kind of arbitrary federal action, a way must be found to give practitioners both voice and representation in government affairs. Government must be caused to recognize the essentiality of seeking their views. One of the difficulties today, however, is that there is no way for concerned practitioners to participate in the early stages of decision-making processes. They usually don't hear about regulations until a proposal appears in the Federal Register, if then. By that time a lot of concrete has been poured, and a lot of boots are in the concrete.

Physicians in private practice, and particularly clinicians, should press for representation on the advisory committees of the Food and Drug Administration, joining with academic and teaching hospital physicians and scientists who are already serving. Though practitioners may not have access to all available information, the value of their clinical experience should be recognized. Clinicians, for example, rightly remind us that difficulty in *proving* precise effects does not necessarily mean a drug is ineffective.

Unless practitioners are more involved in drug regulations, it will be increasingly difficult for the pharmaceutical industry and scientists elsewhere to make optimal progress in drug development. The benefit/risk ratio must be re-emphasized, and as part of this it must be acknowledged that benefit can come from the judgments of medical science as a whole. Even this concept, unfortunately, is not always accepted in drug regulatory processes. For example, if current medical opinion holds that an excess of total lipids and cholesterol in the blood is probably predisposing to atherosclerosis, and if a drug is discovered which reduces total lipids and cholesterol, the drug ought to be accepted *prima facie* as a contribution to medical science . . . until someone disproves the theory. The sponsor should not have to prove the theory as well as to develop and test the drug.

I feel a major new effort must also be made to erase the feeling of mistrust of medicine and of medicines that seems to be growing in the public consciousness. Triggered primarily by strident announcements in Washington, people are reading and hearing confidence-shaking things almost continuously. Although challenge and awareness are essential to medical advancement, our long-term goal is constructively to build, not destroy. This means strengthening patient-physician relationships based on mutual confidence and trust. And in matters of health policy, it means working toward participatory rather than adversary proceedings—where everyone with an interest and a capacity to contribute has an opportunity to be heard . . . and, if that opportunity is not spontaneously afforded him, he may seek it.

Opinion & Dialogue

What is your opinion, doctor?
We would welcome your comments.

P·M·A

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County scenes

Regional symposium on drug abuse scheduled in Genesee

"Drug Abuse—Recognition and Management," is the title of an important symposium planned April 26 by the Genesee County Medical Society. Invitations have been extended to 2,500 physicians and osteopaths from 16 surrounding counties to attend the session at the Pick-Durant Motor Hotel, Flint.

Donald R. Canada, MD, program chairman, has arranged for morning sessions on operation and management of a methadone program, the current status of marijuana as a drug of abuse, and the discontent of today's youth. Afternoon sessions will take up the rehabilitation of an addict, a survey of hallucinogens of natural origin and the desire for drugs.

Speakers will be Aidan Cockburn, MD, medical-dental director of the Detroit Mayor's Committee for Human Resources Development Agency; David E. Smith, MD, assistant clinical professor with the Department of Pharmacology at the University of California Medical Center and medical director of the Haight-Ashbury Medical Clinic in San Francisco, and Norman R. Farnsworth, PhD, head of the Department of Pharmacology at the University of Illinois Medical Center in Chicago.

Richard L. Rapport, MD, GCMS president, is chairman of the symposium, while Clayton K. Stroup, MD, will moderate.

Muskegon physicians hold annual trauma symposium

The Muskegon County Medical Society's 12th Annual Symposium on Trauma attracted area physicians to the local Holiday Inn March 29. Sponsors were the Muskegon chapter, Michigan Committee on Trauma of the American College of Surgeons and the MCMS Medical Foundation. G. W. Annessa, MD, was chairman.

Program topics were the kidney and ureter in trauma, ski injuries, shock unit-stress bleeding, the use of osmonetry in the management of the trauma patient and the multiply injured patient. Following dinner, David Boyd, MD, professor of general surgery at the University of Illinois School of Medicine, discussed the Illinois State Trauma Program.

County societies arranging meetings at MSMS building

Four county medical societies have made arrangements to conduct a regular monthly meeting at MSMS headquarters this spring, to become better acquainted with the MSMS building, staff and projects.

The county societies are Eaton, which met March 23 in East Lansing; Shiawassee, April 11; Barry, April 17, and Livingston, June 6.

The county society members have made arrangements with a caterer for their own dinners. They and their wives will then take part in a question-and-answer program with MSMS staff about the state society, its goals and projects.

Their meetings at state headquarters were sparked by an idea proposed by the MSMS Department of Communications and Professional Information, to improve the state society's communications with its members.

Nine major committees heading all work of Washtenaw Society

An experiment in county society structure is being conducted by the Washtenaw County Medical Society under the leadership of President Dean P. Carron, MD, Ann Arbor.

Doctor Carron organized the Washtenaw Society under nine major-area committees when he took office in January. Task forces will take on specific problems as they are needed and will disband when the problems are solved.

The nine major areas are membership and credentials; public and interprofessional relations; special health services; school health services; medico-socio-economics; health care delivery; finance, ways and means and planning; program and commissary, and ethics.

The committee chairmen are automatically members of the county society's executive committee and report directly to it.

"We reorganized because the former committee structure was so cumbersome and very uncoordinated," says Doctor Carron. "We had people appointed who never met.

"Now we are cooperating closely and I think things are working well. The people involved seem to be very enthusiastic."

The experiment will continue at least two years, as president-elect Neal A. Vanselow, MD, Ann Arbor, also is committed to it.

Bay doctors actively recruiting new physicians

New physicians for the Bay City area was the object when members of the Bay-Arenac-losco counties Medical Society entertained six medical students in their community late in February. While the MSU and WSU medical students were being entertained by the Bay physicians, the students' spouses were introduced to the city by members of the medical society's auxiliary.

The students were given lunch, taken on tours of the community, General and Mercy Hospitals and then entertained at the Bay City Country Club. Their hosts were members of the county society's medical procurement committee, chaired by Richard Bickham, MD.

The Bay society also carries on an extern program. Medical students spend up to two months each summer in an intensive teaching program handled by staff doctors in all phases of medical practice in the Bay City hospitals.

These projects are funded by the Bay County Foundation for Medical Progress, a non-profit corporation established with the donations of citizens taking part in the local polio immunization drive in 1964.

MSMS urging county societies to establish consumer committees

All component medical societies are being "encouraged and challenged" by MSMS to appoint and activate their own consumer committees "in an attempt to create a two-way communications pathway between the consumer and the profession."

The urging comes by way of a letter from the MSMS Committee on Public Relations, sent March 15 to county medical society secretaries, presidents and executive secretaries.

At the 1971 MSMS House of Delegates meeting, the House passed Resolution 28 encouraging the county consumer committees, which would provide the manpower and impetus for a state-wide consumer committee. The county committees are to be made up of local citizens who would speak for the profession.

Macomb physicians invite osteopaths to all meetings

All 204 Macomb county osteopaths have been formally invited to meetings of the Macomb County Medical Society. The Macomb society members voted at their February meeting to open their sessions to the DOs. Letters were mailed on March 7 asking the osteopaths to attend the MCMS meeting of March 21.

The letter expressed the Macomb MDs' belief that the DOs would be interested in scientific meetings and discussions of medical socio-economics. It cited the cooperation of MDs and DOs at the state level.

"We sincerely hope you will accept this invitation to participate in our membership meetings in a new effort to improve the health of Michigan's residents and identify areas of mutual concern," read the letter.

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NEW MSMS MEMBERSHIP

MSMS now has available a gold-filled Official MSMS Membership Pin for use in the coat lapel, as a tie tack, etc. Send check made out to MSMS for $3.00 to Michigan State Medical Society, 120 West Saginaw, East Lansing, Michigan 48823.

Journal of a Neurosurgeon: A book review

By Louis Graff, Director
Health Sciences Relations
University of Michigan

Reading the *Journal* of a *Neurosurgeon* by Edgar (Eddie) A. Kahn, MD, is like going on global, grand rounds of an exciting era with a copy of Baedeker under one arm and the notes of William Beaumont under the other. In the flight bag is a bottle of fine cognac, a few basic surgical instruments, and a 35mm camera.

Even the most seasoned traveler of memoirs and autobiographies will enjoy a return visit to the literary landmarks of a journal genre, written this time by a man who had nearly all that life could offer and made the most of it. Kahn's father, patri-architect Albert, designed automotive plants, Hill Auditorium, the University Hospital, and mansions for magnates. His family was studded with talent, taste and a certain amount of Old World temperament, as when young Eddie's mouth was soaped by an indignant mother for a suspected off-color conversation with a comely cousin.

The New England prep school is there, though at the beginning the grades were not. World War II, France in 1940, and the Red Cross; Dr. Harry Towsley curing the child of a British soldier of meningitis with early and then rare penicillin; removing an unexploded anti-aircraft shell from the spine of a paralyzed GI: elements of the novel lurk latently within the pages of this *Journal*.

Dr. Kahn did not write a technical treatise on neurosurgery, although many unusual cases are described briefly and explained parenthetically for the layman. Rather, these are the random and somewhat chronological recollections about neurosurgeons, notably his teachers, his students and himself. For the men and women of medical science whose community is a curious mixture of mythology and fact the book will be a heartwarming conversation. Undaunted by the critics of his profession and by an unpredictable readership, Dr. Kahn recites time and again the failures as well as the successes in the operating room with a candor that may eventually qualify his *Journal* as required reading for future physicians and surgeons.

Compassion as well as candor punctuate his pages. Neurosurgery in the 30's was a grueling series of patients many of whom were as sure to die without surgery as they were almost sure to die during or after it. These were patients who were paralyzed, blind, suffering from epilepsy or a crushed skull, harboring a deeply embedded tumor, or afflicted with an irreversible congenital condition.

In those days surgery was a slim hope for certain of these patients, and the neurosurgeon's stamina and self-confidence were the only remaining lifeline. If at the end he was exhausted, sick at heart, angry, arrogant or depressed—all or any of which he often was—he sought relief at a hockey game, at an art gallery, or listening to music with his friends until the sun came up again.

Beneath the tension, the training and the tedious technical developments was a sense of adventure, of restlessness, of Rabelaisian robustness. *The Journal* recalls a night spent on board ship in the West Indies at the outbreak of war with a bevy of stranded Copacabana chorus girls with whom the neurosurgeon and his companions danced and sang in a conveniently blacked-out ballroom.

Another time, less delicious but equally invigorating, Kahn recalls the tremendous thrill of riding in a plane piloted by no less than Charles Lindberg. In an uncharacteristic moment of mischievousness the Lone Eagle buzzed the hills along the Huron River west of Ann Arbor in a low-flying single engine Fairchild. As if to memorialize that rare experience, the neurosurgeon later bought the plane.

But it will doubtless be to friends, alumni, former students and professors associated with the University of Michigan Medical School that Dr. Kahn's *Journal* will impart the warmest associations. Time after time he briefly met his commitments, always to return to the alma mater he so deeply loved. He writes proudly and affectionately about the University Hospital, and about the teachers of medicine and surgery whose classes, students and international reputations clearly marked his era as one of the greatest in the history of the institution.

From the ingenious Dr. Max Peet to the incredible Dr. Elizabeth Crosby, Kahn's recital is more than a sentimental typographical tribute. It is a tender memorial to the art of teaching and a forthright testimonial to a tough profession.

For those who dream of world travel, or fantasy themselves striding into a surgical amphitheater; for those who enjoy good music, painting and sculpture; for those who need to anchor their affection for such human values as family, friends and work against the alienating onslaught of technology; and for those who wish to refortify their awe of the surgeon with an intimate portrait of him as a human being, Dr. Kahn's *Journal* is total refreshment. It is being published by Charles C. Thomas and will be on the shelves in February.

The Journal of a *Neurosurgeon* is reading for the tough and tender alike, requiring apology from neither.

MSMS at work...

. . . COMMUNICATING WITH PUBLIC AND PROFESSION

The Department of Communications and Professional Information keeps MSMS members informed of activities within the society. It also seeks to make the public aware of progressive medical thinking through the news media, conferences, etc.

All new members receive a certificate of membership . . . MSMS members receive **Michigan Medicine,** a monthly publication which carries current medical articles, selected by physician-scientific editor . . . Several pertinent columns by MSMS staff and officers also appear each month . . . **Medigram,** a capsulized two-page news sheet, is also mailed twice each month to members to inform them of late-breaking medical news. Each week a sheaf of clippings about medical news is sent to various Michigan leaders in the health professions.

The Department also services the news media. News releases are sent regularly to 50 dailies and 300 weeklies. News writers call almost daily to obtain background information and news sources for feature stories.

Aware of the need to keep news media updated, MSMS sponsors an annual Medical Writers Conference for Michigan science and free-lance writers. News conferences are called periodically to give the MSMS viewpoint on current topics. Recent meetings dealt with the physician assistant program, efforts to decrease infant mortality, and positive suggestions for handling Medicaid payments.

A weekly radio program, "Prescription for Health," sponsored by MSMS, is produced by station WUOM, Ann Arbor, and sent to 30 other stations.

The Department provides liaison with many groups and leaders from such fields as education, youth service, health agencies, community groups, etc.

About 100 Detroit school counselors and social workers participated in the Wayne County Medical Society-sponsored "Adolescent Drug Treatment Conference" March 8.

County in the spotlight

Wayne County doctors fight drug abuse with knowledge and understanding

Richard Henderson, MD, chairman of the Wayne County Medical Society Committee on Drug Addiction discusses the workshop purposes.

In recent years, the problem of adolescent drug abuse has been a growing concern for parents, educators and physicians.

At present, the adolescent tends to seek assistance from his contemporaries rather than the medical profession. In Wayne County, the physicians who recognize this fact believe there is a need to provide the adolescent drug abuser with a comprehensive treatment and rehabilitation program with professional direction.

And those physicians are working to alleviate that need.

School counselors and social workers are, many times, the front line of professional contact with youth. As such, they serve not only in an important counseling role but as important resource referral persons.

With this in mind the Wayne County Medical Society's Committee on Drug Addiction and the Detroit Board of Education sponsored a recent adolescent drug treatment conference.

One hundred school counselors and social workers in the Detroit school system participated. They were divided into four small groups for a better exchange of views.

Seminar topics included adolescence and its problems, psychodynamics of drug dependence, adolescent drug treatment in the community, relationship of the drug treatment center to the schools, and the adolescent drug abuser and family. Emphasis was on adolescent behavior with drug abuse as one facet. Drugs, per se, were not emphasized.

"The program was well received," reports Doctor Henderson. "The participants appreciated both the opportunity to listen to qualified professionals and to discuss with them the problems of adolescents and how the community can best address these problems. Also, the participants acquired an increased awareness of the services already available in the community and how these services can best be utilized."

The Wayne County Society appointed its special committee for drug addiction in January, 1971. Its first chairman was Frank B. Walker, II, MD, who was succeeded in January by Doctor Henderson.

On the committee are representatives of the Wayne County Association of Osteopathic Physicians and Surgeons, the Detroit Medical Society, the Detroit Health Department, the Greater Detroit Area Hospital Council and the Detroit Board of Pharmacy, as well as medical society members.

Since its appointment, the 18-member committee has initiated a continuing series of informative and productive projects.

First, it polled the WCMS membership to find out how many and which physicians are involved in drug treatment programs, which physicians would like to be involved, what they wanted to know and how they would like to help.

The poll led to a morning workshop for Wayne County physicians on counseling and treatment of drug addicts.

Then followed a series of three workshops, cosponsored with the Greater Detroit Area Hospital Council and the Detroit Health Department, de-

(Continued on page 372)

Suggestions for component medical societies which may become more involved in problems of drug abuse

(from H. Richard Henderson, MD, Detroit)

1. Each county is unique, so first define your problem.
    a. Poll physicians in your society to determine the magnitude of the problem as they view it.
    b. Consult with other agencies—the health department, school system, and police department, for example.
2. Encourage a broadly-based community and team approach, utilizing expertise of professionals, such as the educator, social worker, nurse and pharmacist, as well as community people with special skills and interests.
3. Investigate various avenues for obtaining funds—local, state, federal and private. Money, or lack of it, seems to be a major obstacle in initiating programs.

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422 Federal Square Building, Grand Rapids 49502 Telephone: 616-454-4477

Thomas Sullivan, MD, Detroit, works with a forum group on "Psychodynamics of Drug Dependence." Each school counselor and social worker participated in four different forums during the day.

Wayne County Medical Society President Homer Smathers, MD, standing left, is introduced by WCMS Chairman Richard Henderson, MD, to two forum leaders, Thomas Sullivan, MD, right, and Kemal Gaknar, MD, left, during the luncheon break.

signed to encourage the formation of drug treatment programs in Detroit hospitals.

The committee anticipates that its role will continue to expand.

Its next project, to be accomplished by summer, will be to draw up minimum standards for treatment and rehabilitation for the Methadone maintenance programs in Wayne County. This will extend to developing "criteria for success" as well as an evaluation team to insure minimum standards and the future success of drug treatment programs. In this respect, the committee plans to work closely with local public and private agencies as well as Wayne State University Medical School.

In line with these objectives the committee is planning a symposium for Wayne County physicians who are working in Methadone maintenance programs. The symposium will focus on medical management with Methadone, alternatives to Methadone maintenance such as detoxification and the use of chemical substitutes, and treatment of the pregnant addict.

As it has in the past year, the committee will continue to work for the establishment of a Methadone detoxification program at the Wayne County Jail, for the development of more hospital-based drug treatment programs, and for ambulatory detoxification programs on an out-patient basis.

MSMS workshop strengthens ties with county secretaries

Secretaries of county medical societies met March 1 at MSMS headquarters for a workshop session. Van O. Keeler, MD, right, secretary of the Allegan Society, and Donald Fairfield, executive secretary of the Muskegon society, looked over a table of informational materials prepared by the MSMS staff for use in county society business.

As the meeting got underway, welcoming handshakes were exchanged by Thomas A. Kelly, MD, left, secretary, Eaton County, and John M. Jacobitz, MD, secretary, St. Joseph County. A major topic of the day was how county secretaries can play a more prominent role in recruiting, involving and retaining medical society members.

The county society secretaries had the chance to meet MSMS staff members and to suggest ways that the state society could help its component societies more. Doctor Keeler acted as spokesman for the county society leaders.

The importance of a strong relationship between MSMS and its component societies was stressed by MSMS Council Chairman Brooker L. Masters, MD, Fremont.

Welcome

Members of the Michigan State Medical Society join in welcoming the following new members into a progressive state medical organization.

Edward Alpert, MD, 2301 Huron Parkway, Ann Arbor 48104
Jerry W. Brackett, MD, 1731 Seminole, Detroit 48214
James Broselow, MD, 2521 Dow Place, Saginaw 48602
Norman J. Breuer, MD, 23300 Greenfield Rd., Oak Park 48237
Matthew L. Burman, MD, 26356 Franklin Pte. Dr., Southfield 48076
E. R. Cleveland, MD, 1500 Weiss St., Saginaw 48602
Jack W. DeLong, MD, 144 W. 26th St., Holland 49423
Lenard E. Fouche, MD, 2901 S. Westnedge, Kalamazoo 49001
Paul L. Ginther, MD, 5105 N. Kentford Dr., Saginaw 48602
Jose B. Gotay, MD, 4365 Kirkwood Dr., Saginaw 48603
Leroy B. Green, MD, 114 W. North, Owosso 48867
John R. Gruca, MD, 108 S. Christine Circle, Mt. Clemens 48403
Loyde H. Hudson, MD, 721 W. Sixth Ave., Flint 48503
Ihsan Kent, MD, 9880 E. Michigan, Galesburg 49053
Efrain E. Leguizamon, MD, 1631 Gull Rd., Kalamazoo 49001
L. A. Lindquist, MD, 113 E. Williams, Owosso 48867
Tomas A. Macatangay, MD, 22532 Meadowbrook Rd., Novi 48050
Azizolah Malakuti, MD, 140 Elizabeth Lake Rd., Pontiac 48053
Irineo C. Matias, MD, Wm. Beaumont Hosp., Royal Oak 48072
John D. Mellen, MD, Wm. Beaumont Hosp., Royal Oak 48072
Lance E. Nelson, MD, 575 Robbins Rd., Grand Haven 49417
Richard E. Noon, MD, 726 Parkman Dr., Bloomfield Hills 48013
Sai Rok Park, MD, Wm. Beaumont Hosp., Royal Oak 48072
D. M. Rubino, MD, 113 E. Williams, Owosso 48867
Vidal J. Sanchez, MD, 13624 Murthum Dr., Warren 48093
William M. Slater, MD, 212 Medical Arts Center, Muskegon 49440
Gloria M. Strutz, MD, 27827 Thirty Mile Rd., Richmond 48062
Ralph Ten Have, Jr., MD, 425 Cherry St., S.E., Grand Rapids 49502
Gertraud Wollschlaeger, MD, 5885 Wing Lake Rd., Birmingham 48010
Paul B. Wollschlaeger, MD, 5885 Wing Lake Rd., Birmingham 48010
H. Kenneth Wong, MD, 23023 Orchard Lake Rd., Farmington 48024

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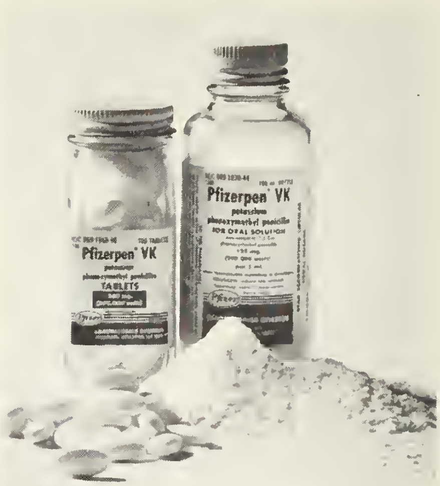
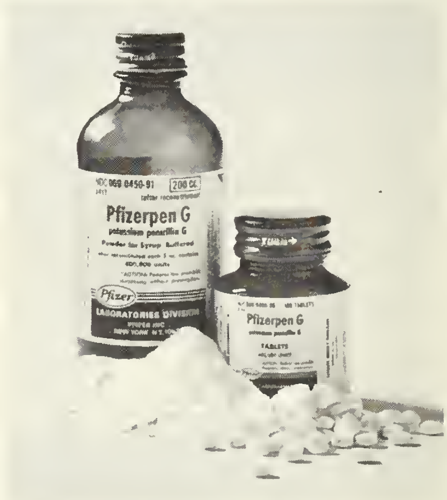


Orange-flavored Pfizerpen VK for Oral Solution (potassium phenoxymethyl penicillin)
125 mg. (200,000 units)/5 cc.:
bottles of 100 cc. and 150 cc.
250 mg. (400,000 units)/5 cc.:
bottles of 100 cc. and 150 cc.

Pfizerpen VK Tablets (potassium phenoxymethyl penicillin)
250 mg. (400,000 units): bottles of 100.
500 mg. (800,000 units): bottles of 100.



Butterscotch-caramel-flavored Pfizerpen G Powder for Syrup (potassium penicillin G)
400,000 units/5 cc.:
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250,000 units: bottles of 100.
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G OR VK. JUST
MAKE SURE IT'S PFIZERPEN.

Ancillary

Here's a tale of a non-smoking project that also makes money

By Hugh Hufnagel
Lansing General Hospital

Any third grade arithmetic teacher will tell you that you can't add apples and cigarettes. But at Lansing General Hospital patients and employees are finding out that it's possible to subtract cigarettes and add apples.

Here is what happened.

Last fall, the Michigan State Medical Society (MSMS) urged "all hospitals to campaign against smoking in patient care areas." Further, the MSMS Committee on Cardiac Disease recommended "cessation of the sale of all cigarettes inside the hospital."

These two proposals not only received the immediate endorsement of the administration and medical staff at Lansing General Hospital, but the no smoking movement was carried a little further.

A list of smoking rules were developed:

1. The sale of smoking materials is prohibited in the hospital.
2. Patients not confined to bed must get out of bed to smoke.
3. All sedated patients desiring to smoke must be attended by hospital personnel.
4. No visitor smoking is permitted in patient rooms.
5. No smoking is allowed in elevators or halls.
6. Smoking is not permitted in public areas or departments directly associated with care and treatment of patients.

The finished list of rules was then approved by the hospital's Employee Council and put into effect.

Without fanfare, the cigarette machine disappeared as did the gift shop's stock of cigarettes.

For the hospital service league, which sold over 24,000 packages of cigarettes in the gift shop during 1971, this meant an immediate drop in revenue. Then along came the apple idea.

Marian Renaud, manager of the gift shop, explained: "At first, we just brought a few in ourselves to see how they would sell. It wasn't long before the word spread and the apple business caught fire. Now we sell 100 to 120 per day."

Because of a higher margin on the apples, revenues are anticipated to be 150% of those on cigarettes.

"The transition from cigarettes to apples wasn't completely smooth," said Mrs. Renaud. "But after a few minor grumblings, the career smokers seem to have adjusted."

French surgeon keynote speaker for kidney symposium

The surgeon who performed the world's first kidney transplant will be a guest speaker at the 11th annual Kidney Disease Symposium scheduled May 19 and 20 at the Mercy College Conference Center.

Jean Hamburger, MD, of Necker Hospital, Paris, France will be the opening speaker in the morning session devoted to renal transplantation. Also participating in the discussion, will be John R. Ackermann, MD; Stanley G. Dienst, MD; Jerry C. Rosenberg, MD; Thomas E. Starzl, MD and Bruce H. Stewart, MD.

In addition to renal transplantation there will be sessions on the diagnosis of renal disease and hypertension, a session on pediatric nephrology, as well as newer concepts in therapy. Dr. George Schreiner, past president of the National Kidney Foundation, will be one of several speakers Saturday afternoon discussing the therapy of drug overdose.

A total of 23 have been invited to speak at sessions aimed at physicians, nurses, technicians and other allied health personnel.

Sidney Baskin, MD, director of Kidney Center, Mt. Carmel Mercy Hospital and Medical Center, Detroit, is chairman of the symposium. Mt. Carmel is co-sponsoring the event.

Mercy College is at 8200 West Outer Drive, Detroit. Persons from nine states and the eastern section of Canada are expected to attend. On-campus housing is available by contacting Mercy College Conference Center, area code (313) 531-7820, Ext. 272.

Bob Talbert of the *Detroit Free Press* will be guest speaker at the dinner and guests will be entertained by a "mechanical man."

Further information regarding the symposium program may be obtained by contacting the Kidney Foundation of Michigan's central office in Ann Arbor, telephone area code (313) 971-2800.

On the next two pages:
An important announcement
for you and your patients.

New from Colgate:

Superior Gram negativ

P·300
ANTI-BACTERIAL DEODORANT SOAP

Effective against Gram positive bacteria and Gram negative bacteria.

As mild as any other toilet soap. With unsurpassed substantivity for long-lasting antibacterial action.

Active ingredients: 3, 4′, 5-tribromosalicylanilide and 4, 2′,4′-trichloro-2-hydroxy diphenyl ether. Together these agents produce a synergistic effect that provides broad spectrum protection against skin bacteria. (P-300 does not contain hexachlorophene.)

The new all-purpose soap for homes, offices, hospitals, schools, restaurants, food processing plants, laboratories, etc.

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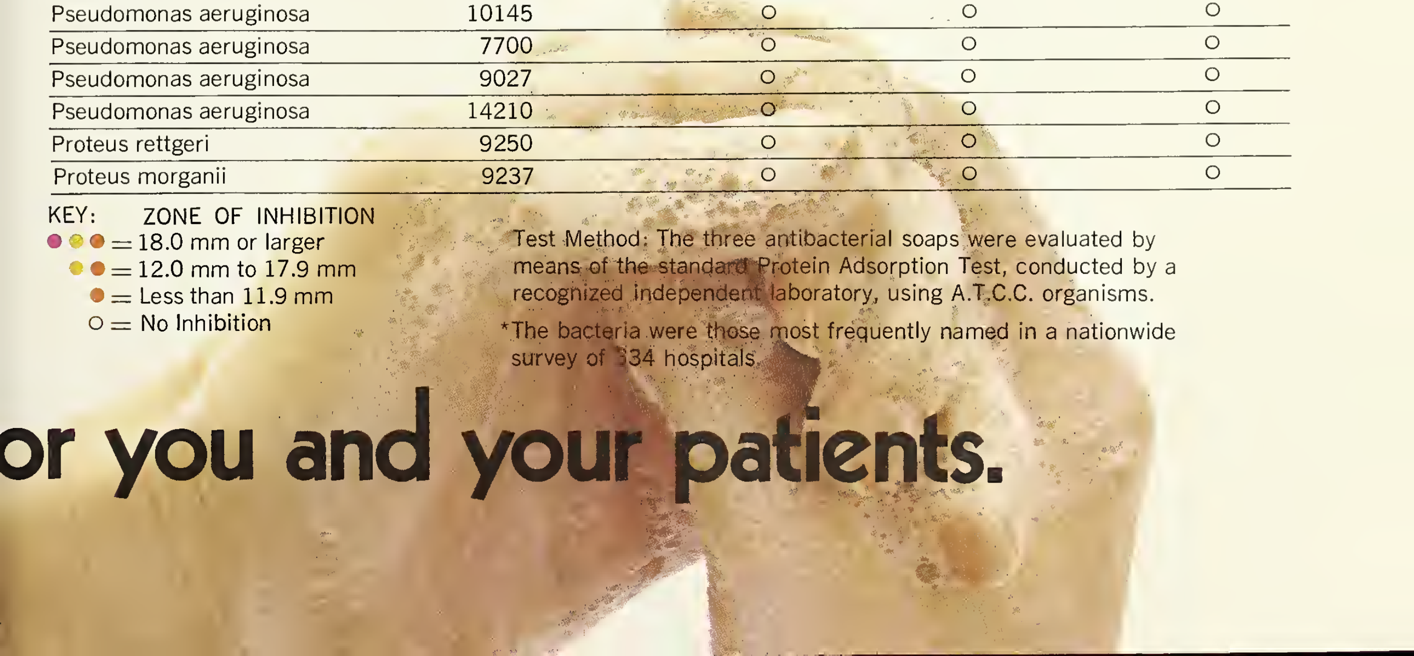
P-300–superior to other antibacterial bar soaps. Proven effective against 25 of 31 cultures representing bacteria of major concern in nosocomial infections and cross-infections.*

BACTERIA	A.T.C.C. No.	P-300	Soap "D"	Soap "S"
Gram Positive				
Staphylococcus aureus	8094	●●●	●	●
Staphylococcus aureus	11371	●●●	●	●
Staphylococcus aureus	8096	●●●	●	●
Staphylococcus aureus	10390	●●●	●	●
Staphylococcus aureus	6342	●●●	●	●
Staphylococcus epidermidis	17917	●●●	●	●
Staphylococcus sp.	13565	●●●	●	●●
Mycobacterium smegmatis	19420	●●●	●●	●●
Listeria monocytogenes	13932	●●●	●●	●●●
Streptococcus pyogenes	7958	●	●	●
Streptococcus mitis	903	●	●	●
Streptococcus sp.	12403	●	●	●
Bacillus anthracis	14578	●	●●	●●
Gram Negative				
Alcaligenes tolerans	19359	●●●	●●	●●●
Neisseria gonorrhoeae	19424	●●	●	●
Neisseria menigitidis	13077	●●●	●	●
Proteus vulgaris	8427	●●●	●	○
Escherichia coli	10536	●	○	○
Escherichia coli	11229	●	○	○
Escherichia coli	11698	●	○	○
Klebsiella pneumoniae	12833	●	○	○
Salmonella typhi	9993	●	○	○
Salmonella typhi	6539	●	○	○
Salmonella typhimurium	13311	●	○	○
Herellea sp.	11959	●	○	○
Pseudomonas aeruginosa	10145	○	○	○
Pseudomonas aeruginosa	7700	○	○	○
Pseudomonas aeruginosa	9027	○	○	○
Pseudomonas aeruginosa	14210	○	○	○
Proteus rettgeri	9250	○	○	○
Proteus morganii	9237	○	○	○

KEY: ZONE OF INHIBITION
●●● = 18.0 mm or larger
●● = 12.0 mm to 17.9 mm
● = Less than 11.9 mm
○ = No Inhibition

Test Method: The three antibacterial soaps were evaluated by means of the standard Protein Adsorption Test, conducted by a recognized independent laboratory, using A.T.C.C. organisms.

*The bacteria were those most frequently named in a nationwide survey of 334 hospitals.



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Contraindications: Concurrently with MAO inhibitors, in patients hypersensitive to this drug; in emotionally unstable patients susceptible to drug abuse.
Warning: Although generally safer than the amphetamines, use with great caution in patients with severe hypertension or severe cardiovascular disease. Do not use during first trimester of pregnancy unless potential benefits outweigh potential risks.
Adverse Reactions: Rarely severe enough to require discontinuation of therapy, unpleasant symptoms with diethylpropion hydrochloride have been reported to occur in relatively low incidence. As is characteristic of sympathomimetic agents, it may occasionally cause CNS *effects* such as insomnia, nervousness, dizziness, anxiety, and jitteriness. In contrast, CNS depression has been reported. In a few epileptics an increase in convulsive episodes has been reported. Sympathomimetic cardiovascular *effects* reported include ones such as tachycardia, precordial pain, arrhythmia, palpitation, and increased blood pressure. One published report described T-wave changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride; this was an isolated experience, which has not been reported by others. *Allergic phenomena* reported include such conditions as rash, urticaria, ecchymosis, and erythema. *Gastrointestinal effects* such as diarrhea, constipation, nausea, vomiting, and abdominal discomfort have been reported. Specific reports on the hematopoietic system include two each of bone marrow depression, agranulocytosis, and leukopenia. A variety of miscellaneous adverse reactions have been reported by physicians. These include complaints such as dry mouth, headache, dyspnea, menstrual upset, hair loss, muscle pain, decreased libido, dysuria, and polyuria.
Convenience of two dosage forms: TEPANIL Ten-tab tablets: One 75 mg. tablet daily, swallowed whole, in midmorning (10 a.m.); TEPANIL: One 25 mg. tablet three times daily, one hour before meals. If desired, an additional tablet may be given in midevening to overcome night hunger. Use in children under 12 years of age is not recommended.

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- ☐ Prevents painful night leg cramps
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- ☐ Provides simple convenient dosage—usually just one tablet at bedtime

Prescribing Information—Composition: Each white, beveled, compressed tablet contains: Quinine sulfate, 260 mg., Aminophylline, 195 mg. **Indications:** For the prevention and treatment of nocturnal and recumbency leg muscle cramps, including those associated with arthritis, diabetes, varicose veins, thrombophlebitis, arteriosclerosis and static foot deformities. **Contraindications:** Quinamm is contraindicated in pregnancy because of its quinine content. **Precautions/Adverse Reactions:** Aminophylline may produce intestinal cramps in some instances, and quinine may produce symptoms of cinchonism, such as tinnitus, dizziness, and gastrointestinal disturbance. Discontinue use if ringing in the ears, deafness, skin rash, or visual disturbances occur. **Dosage:** One tablet upon retiring. Where necessary, dosage may be increased to one tablet following the evening meal and one tablet upon retiring. **Supplied:** Bottles of 100 and 500 tablets.

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Trademark: Quinamm

Quinamm

(quinine sulfate 260 mg., aminophylline 195 mg.)

Specific therapy for night leg cramps.

Here is program for Medical Staff-Trustee-Administrator Forum

The changing roles of hospital staffs, governing boards, and management; group practices and HMOs will be explored at the annual Medical Staff-Trustee-Administrator Forum May 24-26 at Boyne Mountain Lodge. Co-sponsors are the Michigan Hospital Association, MSMS, the Michigan Osteopathic Hospital Association and the Michigan Association of Osteopathic Physicians and Surgeons.

"Health Care in A Time of Change" is the general theme of the talks which will feature roundtable discussions. A nationally prominent speaker is being arranged for the May 24 convening dinner.

On the morning of May 25, the topic will be "The Changing Responsibilities of Governing Boards and Management," with Charles Jacobs, JD, assistant director, Joint Commission on Accreditation of Hospitals. "Medical Staff Responsibilities Redefined," with Walter W. Carroll, MD, associate director, Joint Commission on Accreditation of Hospitals; and "Medical Staff Bylaws, Rules and Regulations," with Doctor Jacobs, will be presented in the afternoon.

On May 26, the topic will be "Group Practice and HMOs—Changing Emphasis in Health Care." Among the speakers will be Charles R. Goulet, former director of the University of Chicago Hospitals and Clinics, and now vice president of the Hospital Service Corporation of Chicago, and William Flaherty, vice president for administration of Michigan Blue Cross.

On the planning committee for the forum are Lewis Simoni, MD, Flint, and Leo Walker, MD, Lansing, representing MSMS.

Rheumatologists may prepare for first certification

The American Board of Internal Medicine has established a new subspecialty area of rheumatology, with the first examination for certification to be given by the board on Oct. 17, 1972.

As an aid to its members and others interested, the American Rheumatism Association Section of the Arthritis Foundation will offer a Review Session in Rheumatology in conjunction with its annual meeting at the Fairmont Hotel in Dallas June 10.

Reservations may be sent to the executive secretary, American Rheumatism Association Section, the Arthritis Foundation, 1212 Avenue of the Americas, New York, 10036, no later than May 25. The session will cost $50.

Woman's Auxiliary planning April 19 Legislative Day

The emphasis will be on state medical legislation at the annual Legislative Day planned April 19 at the Hospitality Inn, East Lansing, by the Woman's Auxiliary to the MSMS.

A rundown on important bills passed or pending in the state legislature will be provided for the women's group by John J. Coury, MD, Port Huron, MSMS president-elect. A brief description of activities of the Michigan Doctors Political Action Group will be given by Louis R. Zako, MD, Allen Park, MSMS councillor and MDPAC chairman.

Invitations have been extended by the auxiliary to Sidney Adler, MD, Detroit, MSMS president, and Brooker L. Masters, MD, Fremont, MSMS Council chairman, and their wives; to Warren F. Tryloff, MSMS director; Bruce Ambrose, director, MSMS Department of Government Affairs and Mrs. Sherry Hall, MSMS special assistant, Legislative Liaison.

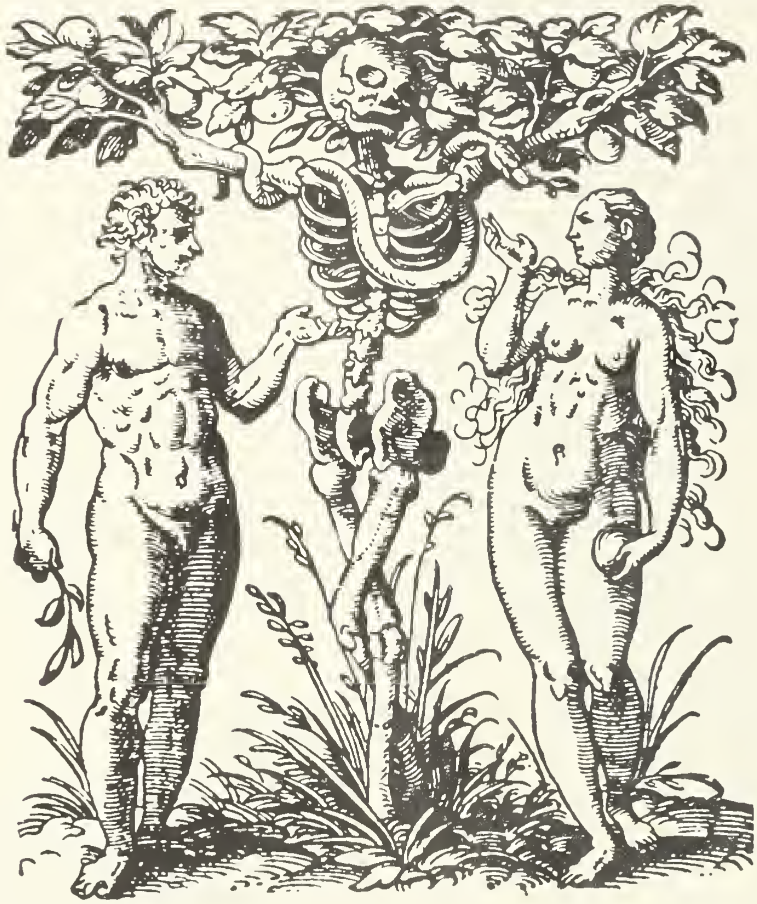
State legislators will be invited to lunch with the auxiliary members. Nearly 40 senators and representatives attended the 1971 event.

Horizons Unlimited

MSMS members may obtain copies of the AMA "Horizons Unlimited" career handbook with an eight-page Michigan insert by writing to MSMS, P.O. Box 950, East Lansing 48823.

In acute gonorrhea

(urethritis, cervicitis, proctitis when due to susceptible strains of N. gonorrhoeae)



Sterile Trobicin®
(spectinomycin dihydrochloride pentahydrate)—For Intramuscular injections, 2 gm vials containing 5 ml when reconstituted with diluent. 4 gm vials containing 10 ml when reconstituted with diluent.
An aminocyclitol antibiotic active *in vitro* against most strains of *Neisseria gonorrhoeae* (MIC 7.5 to 20 mcg/ml). Definitive *in vitro* studies have shown no cross resistance of *N. gonorrhoeae* between Trobicin and penicillin.

Indications: Acute gonorrheal urethritis and proctitis in the male and acute gonorrheal cervicitis and proctitis in the female when due to susceptible strains of *N. gonorrhoeae*.

Contraindications: Contraindicated in patients previously found hypersensitive to Trobicin. Not indicated for the treatment of syphilis.

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Warnings: Antibiotics used to treat gonorrhea may mask or delay the symptoms of incubating syphilis. Patients should be carefully examined and monthly serological follow-up for at least 3 months should be instituted if the diagnosis of syphilis is suspected.

Safety for use in infants, children and pregnant women has not been established.

Precautions: The usual precautions should be observed with atopic individuals. Clinical effectiveness should be monitored to detect evidence of development of resistance of *N. gonorrhoeae*.

Adverse reactions: The following reactions were observed during the single-dose clinical trials: soreness of the injection site, urticaria, dizziness, nausea, chills, fever and insomnia.
During multiple-dose subchronic tolerance studies in normal human volunteers, the following were noted: a decrease in hemo-

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sterile spectinomycin dihydrochloride pentahydrate, Upjohn

single-dose intramuscular treatment

High cure rate:* **96% of 571 males, 95% of 294 females**
(Dosages, sites of infection, and criteria for diagnosis and cure are defined below.)**

Assurance of a single-dose, physician-controlled treatment schedule

No allergic reactions occurred in patients with an alleged history of penicillin sensitivity when treated with Trobicin, although penicillin antibody studies were not performed

Active against most strains of Neisseria gonorrhoeae in vitro (M.I.C. 7.5-20 mcg/ml)

A single two-gram injection produces peak serum concentrations averaging about 100 mcg/ml in one hour (average serum concentrations of 15 mcg/ml present 8 hours after dosing)

Note: Antibiotics used in high doses for short periods of time to treat gonorrhea may mask or delay the symptoms of incubating syphilis. Since the treatment of syphilis demands prolonged therapy with any effective antibiotic, and since Trobicin is not indicated in the treatment of syphilis, patients being treated for gonorrhea should be closely observed clinically. Monthly serological follow-up for at least 3 months should be instituted if the diagnosis of syphilis is suspected. Trobicin is contraindicated in patients previously found hypersensitive to it.

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*Data compiled from reports of 14 investigators. **Diagnosis was confirmed by cultural identification of *N. gonorrhoeae* on Thayer-Martin media in all patients. Criteria for cure: negative culture after at least 2 days post-treatment in males and at least 7 days post-treatment in females. Any positive culture obtained post-treatment was considered evidence of treatment failure even though the follow-up period might have been less than the periods cited above under "criteria for cure" except when the investigator determined that reinfection through additional sexual contacts was likely. Such cases were judged to be reinfections rather than relapses or failures. These cases were regarded as non-evaluatable and were not included. JA72 1848-6

globin, hematocrit and creatinine clearance; elevation of alkaline phosphatase, BUN and SGPT. In single and multiple-dose studies in normal volunteers, a reduction in urine output was noted. Extensive renal function studies demonstrated no consistent changes indicative of renal toxicity.

Dosage and administration: Keep at 25°C and use within 24 hours after reconstitution with diluent.
Male—single 2 gram dose (5 ml) intramuscularly. Patients with gonorrheal proctitis and patients being re-treated after failure of previous antibiotic therapy should receive 4 grams (10 ml). In geographic areas where antibiotic resistance is known to be prevalent, initial treatment with 4 grams (10 ml) intramuscularly is preferred.
Female—single 4 gram dose (10 ml) intramuscularly.

How supplied: *Vials, 2 and 4 grams—with ampoule of Bacteriostatic Water for Injection with Benzyl Alcohol 0.9% w/v.* Reconstitution yields 5 and 10 ml respectively with a concentration of spectinomycin dihydrochloride pentahydrate equivalent to 400 mg spectinomycin per ml. For intramuscular use only.
Susceptibility Powder—for testing *in vitro* susceptibility of *N. gonorrhoeae.*

Human pharmacology: Rapidly absorbed after intramuscular injection. A two-gram injection produces peak serum concentrations averaging about 100 mcg/ml at one hour with 15 mcg/ml at 8 hours. A four-gram injection produces peak serum concentrations averaging 160 mcg/ml at two hours with 31 mcg/ml at 8 hours.
For additional product information, see your Upjohn representative or consult the package insert. MED-B-1-S (LWB)

Upjohn The Upjohn Company, Kalamazoo, Michigan 49001

A delegation of over 60 persons—MDPAC members, their wives and families—made the trip to Washington, D.C., in mid-March for the annual AMA-AMPAC Public Affairs Workshop. Preceding the weekend workshop, the Michigan physicians and their families met their congressmen at a Capitol Hill Club reception. Louis R. Zako, MD, Allen Park, MDPAC chairman, left, and Robert D. Allaben, MD, Detroit, center, met with Rep. Philip E. Ruppe, R-Houghton for an informal talk.

'Washington Weekend' a hit with MDPAC

Other key people at the MDPAC reception were, from left, William G. Zimmerman, MD, Grand Rapids; Rep. Gerald R. Ford (R-Grand Rapids), minority leader of the House; Rep. William S. Broomfield (R-Royal Oak), and Brooker L. Masters, MD, Fremont, MSMS Council chairman. During their Washington Weekend, members of the MDPAC delegation took in a Van Cliburn concert at Kennedy Center for the Performing Arts, heard AMA heads including President Wesley W. Hall, MD; were addressed by AMPAC leaders and heard national legislative figures.

Senator Philip A. Hart (D-Mackinac Island) attended the MDPAC reception, where he was the guest of Dr. and Mrs. Robert Solomon of Grosse Ile. Sen. Hart was among 13 members of the Michigan congressional delegation who were present at the reception.

Immediate Past MDPAC Chairman Donato F. Sarapo, and Mrs. Sarapo, right, met at the reception with their congressman, Marvin L. Esch (R-Ann Arbor) and Mrs. Esch, and then took the Esches out to dinner as their official hosts for the evening. The pattern was followed by many of the MDPAC couples designated as official hosts of their congressmen for the evening.

Emergency physicians introduce JACEP, their official journal

The "maiden" issue of *JACEP,* Journal of the American College of Emergency Physicians, has been introduced to the emergency room physicians who are members of the four-year-old college, and other interested medical personnel.

Th January-February issue of the journal (to be published every two months) features a modern, up-dated makeup style and departments on books, dates, editorials, letters, members, news, placement and products.

Feature articles take up the topics of emergency management of drug abuse, dental procedures and acute eye problems. "Health Care's Hidden Crisis," and "Arrhythmias in Myocardial Infarction" are two more topics.

"ACEP has only one goal in mind in publishing this journal," writes John H. van de Leuv, MD, *JACEP* editor. "That is to provide a publication which will effectively serve the medical and ancillary personnel who are involved in the delivery of emergency medical services.

"*JACEP* will provide a medium for the exchange of ideas, problems, helpful hints, scientific articles, opinions and news relating not only to ACEP activities and goals but to the entire field of emergency medical care," continues Doctor van de Leuv. "*JACEP* will be professional, practical, and progressive."

Consulting editors for *JACEP* include Charles F. Frey, MD, associate professor of surgery, University of Michigan Medical Center, Ann Arbor, and Michael C. Kozonis, MD, Kozonis-Overy Clinic, PC, Pontiac.

Doctor van de Leuv is a member of the board of directors of the 2,800 member ACEP.

MD Placement Notice

—Looking for a smaller town that needs and wants a physician?

—Do you need an associate or assistant in your practice?

—Are there towns in your area in need of additional physicians?

—If your answer is YES to any of the above questions, contact

Michigan Health Council
John A. Doherty, Executive Secretary
712 Abbott Rd., P.O. Box 431
East Lansing (Phone: 337-1615)
(No charge for this service)

Michigan's medical assistants to meet April 27-30

Members of the American Association of Medical Assistants, State of Michigan branch, will meet in Kalamazoo April 27-30 for their annual meeting. Highlights of the three-day event will be election and installation of officers and presentation of awards.

The medical assistants will stage a special reception April 28 for Glenn E. Millard, MD, Detroit, who is retiring after 14 years as an advisor to the state medical assistants' group, 12 of them as chairman of the advisory committee. Doctor Millard also served two years as chairman of the physicians' advisory committee to the national medical assistants organization. Hostesses for the reception will be the 1971-72 officers and active past presidents.

Topics of talks during the medical assistants' meeting will include air pollution, medical assistant programs in high schools and the alcoholic woman. An arts and crafts show featuring work by medical assistants also will be staged.

Wayne med students developing catalogue for loan program

Wayne State University Medical students are compiling a catalogue of communities interested in their innovative and successful Wayne State-Community-Student Loan Program.

Under the program, a community offers to pay education expenses for a medical student in exchange for his guarantee that he will practice in that community on graduation.

Included in the catalogue is information regarding the availability of summer jobs, existing medical facilities and personnel, possibilities of group practice, and a brief description of each community. The catalogue is an outgrowth of the loan program established in the fall, 1970.

It is available by writing the Wayne State-Community Loan Program, c/o Douglas R. Jackson, 540 E. Canfield Ave., Detroit, 48201; or John A. Doherty, Michigan Health Council, 712 Abbott Road, East Lansing 48823.

25 orthopedic physician assistants training at Marygrove

Marygrove College in Detroit accepted its first class of 25 students in September in a two-year course to train orthopedic physician's assistants. Marygrove is now a coeducational college and trains different kinds of people in the allied health fields.

Marygrove worked out the curriculum with the support of the Michigan Orthopedic Society; and has affiliations with five hospitals for training.

Of 65 applicants for the class, 25 were chosen, both men and women. The Marygrove college graduates will get an associate of arts degree. They will be employed primarily, it is believed, by hospitals and orthopedic physician groups.

The students are getting special training in five areas of orthopedic work—plaster, traction, emergencies, surgery, and the orthopedic surgeon's office. Maurice Castle, MD, is co-director for the curricula.

Marygrove has applied to the AMA for certification of this program, and has applied to HEW for special funding. The college did not need approval of the State Department of Education to begin the course.

There are only five such programs in operation in the nation, with others on the planning boards.

Michigan physicians may use Missouri center for bone tumor referrals

One of three newly established Bone Tumor Referral Centers in the nation is located in the Department of Radiology at the University of Missouri Medical Center, Columbia, Missouri. Designed to help physicians in the diagnostic evaluation of bone tumor X-rays, the Centers (also in Los Angeles and Philadelphia) were established at the recommendation of the Commission on Cancer of the American College of Radiology.

Radiographs and patient resumes may be sent to Gwilym S. Lodwick, MD, professor and chairman of the Department of Radiology, University of Missouri Medical Center, Columbia, Missouri 65201. There is no charge for the service.

Great Lakes health manpower conference April 12

The nation's only full-blooded American Indian dentist, who recently was named to head a national effort to recruit minority groups into health careers, will keynote the Great Lakes Health Manpower Conference April 12 at Kellogg Center, East Lansing.

George Blue Spruce, DDS, director, Office of Health Manpower Opportunity, Bureau of Health Manpower Education, HEW, Bethesda, Md., will lead the conference co-sponsored by the Michigan Health Council and Michigan State University.

Guidance counselors, directors of vocational education, health professionals and administrators of allied health training programs in high schools, colleges, and universities are being invited to attend. Special emphasis will be given to the importance of attracting and counseling more black, American Indian and Chicano students into health professions and occupations.

Emergency care topic of two Michigan meetings

Two important three-day courses on the emergency treatment of seriously injured or ill patients are planned late this spring.

The first is the 7th annual Conference on the Initial Management of the Acutely Ill or Injured Patient scheduled June 5-7 in Ann Arbor. Emphasis will be made on the practical aspects of emergency care, with a variety of workshops, demonstrations and lectures planned. On the committee are representatives of police, fire, medical personnel, the Red Cross, industrial and other emergency agencies.

The second, designed for physicians, is the American College of Surgeons Committee on Trauma's continuing medical education course on the "Treatment of the Seriously Injured or Ill in the Emergency Department." It is planned May 31-June 3 at Wayne County Medical Society headquarters. Registration is limited to 200 persons.

Medical assistants selling dessert cookbook

Sales of a new "Fabulous Dessert Cookbook" are being promoted by members of the American Association of Medical Assistants, State of Michigan. Orders are being taken by Mrs. Anita Snyder, 344 Center St., Michigan Center 49254, with proceeds to go to the Michigan Maxine Williams Scholarship Fund to help girls wishing to receive their education in the medical assistant field.

70 medical students in SAMA-MECO project this summer

Come June, nearly 70 Michigan medical students, most of them pre-sophomores, will begin a summer of clinical experience in community hospitals all around the state.

They will be the largest group yet to take part in Michigan's Student American Medical Association Medical Education Community Orientation program. The SAMA-MECO project is designed to give students firsthand involvement in the medical field early in their academic careers, and to encourage them to practice on graduation in the outstate communities so desperately wanting physicians.

An additional 90 students interested in the 1972 SAMA-MECO project could not be placed because there weren't enough openings.

The number of participating students has expanded from 11 in the summer of '70, the first year of Michigan involvement, to 50 in 1971 and nearly 70 this supper. The number of hospitals sponsoring the students is 60 this year, with three of them in the upper peninsula.

Most of the students are gaining clinical experience in smaller communities, though two will be based in Detroit. Many of the students are returning to their home towns for the summer session.

In each case, the students are supervised by a physician-program director, many of them family practitioners.

Coordinating the program is the MSMS Department of Communications and Professional Information, in cooperation with the Michigan Hospital Association and the Michigan Academy of Family Practice. The project is directed by the MSMS Education Liasion Committee, chaired by Brock E. Brush, MD, Detroit.

The medical students are from all three Michigan medical schools. Student coordinators are John Bruder, Wayne State University, and Bryan Schumaker, Michigan State University, both of whom are taking part in this year's program, and Randy Nesse, University of Michigan, who participated in the summer of '71.

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Rudolf E. Nobel, M.D.
Gerard M. Schmit, M.D.
Joseph J. Tiziani, M.D.
Prehlad S. Vachher, M.D.
Richard D. Watkins, M.D.
Robert M. Zimmerman, M.D.

Consultation skills, community relations topics of U-M meetings

Full-time health personnel with voluntary or official agencies are eligible for two continuing education courses planned by the Department of Community Health Services and the Health Education Program, School of Public Health, the U-M.

The first course, on consultation skills, is scheduled July 9-14, for persons responsible for planning and implementing health programs. Completed applications are due by May 30. The second course, on community and professional relations, is for persons with responsibilities in community organization, planning, or programming.

Both courses will cost $135, will be held at Weber's Inn, Ann Arbor, and are limited to 50 persons. Forms are available through Anna B. Brown, PhD, assistant professor of public health administration, M4234 School of Public Health II, U-M, Ann Arbor, 48104.

U-M Hospital certified as rare blood facility

The University of Michigan Hospital is the 10th in the nation to be certified by the American Association of Blood Banks with a reference laboratory with facilities and trained personnel to identify and match rare blood. Only 27 such laboratories exist around the country, 10 of them in hospitals. The U-M hospital transfuses 20,000 pints of blood each year, keeps 300 pints of blood on hand at all times and has a file of 1,600 local donors. In addition, the U-M lab keeps a supply of frozen blood cells to identify rare blood.

Doctor Shumway to headline Heart Days April 14-15

Norman E. Shumway, MD, the national heart transplant authority who is a Kalamazoo native, will return to Michigan to lecture at the Michigan Heart Association's Annual Heart Days and Scientific Sessions April 14-15 at Cobo Hall, Detroit.

Doctor Shumway, chief, Division of Cardiovascular Surgery at Stanford University, will discuss the surgeon's role in the treatment of coronary artery disease. He will speak the morning of the 15th. General theme of the two-day sessions is atherosclerosis and its complications.

WSU Cancer Symposium scheduled April 28

Eight out-of-state physicians, from Toronto; Berkeley and Davis, California; New York; Boston; Pittsburgh and Houston, will join Michigan doctors in presenting the fifth annual Cancer Symposium of Wayne State University's School of Medicine April 28.

"Early Cancer of the Breast" is the subject of the symposium, which will waive the $25 registration fee for students, interns and residents. Melvin L. Reed, MD, is chairman of the symposium, to be held at Wayne County Medical Society headquarters, 1010 Antietam, Detroit.

AMA recruitment effort to involve Michigan

State medical associations, including Michigan's, will assist the AMA in a membership recruitment program to be conducted this year. The AMA board of trustees approved a $150,000 campaign late in January. Preliminary data show that between year-end 1970 and year-end 1971, AMA membership decreased by 4%. Dues-paying membership declined from 168,214 in 1970 to 156,943 in 1971, a drop of 7%.

MARMP has new acting coordinator

The Michigan Association for Regional Medical Programs is continuing its search for a permanent program coordinator to replace Albert E. Heustis, MD, who retired from the post Sept. 1.

New acting program coordinator is Theodore Lopushinski, PhD, who took over Jan. 1 from Gaetane LaRocque, PhD. Doctor LaRocque had filled in since Doctor Heustis's retirement.

Cardiac care instruments topic of May 22-23 meeting

A National Conference on Instrumentation and Hazards in Cardiac Care is scheduled May 22-23 at the Towsley Center for Continuing Medical Education, University Medical Center, Ann Arbor.

The conference has four main sections—electrical hazards, equipment selection and maintenance, effective utilization of instruments, and new trends in patient care systems. It is chaired by Henry L. Green, MD, Detroit cardiologist and chairman of the Instrumentation Study Group, Inter-Society Commission on Heart Disease Resources.

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a new outlook in chronic pain

of moderate to severe intensity

Though Talwin® can be compared to codeine in analgesic efficacy, it is not a narcotic. So patients receiving Talwin for prolonged periods face fewer of the consequences you've come to expect with narcotic analgesics. And that, in the long run, can mean a better outlook for your chronic-pain patient.

Talwin Tablets are:

- **Comparable to codeine in analgesic efficacy:** one 50 mg. Talwin Tablet appears equivalent in analgesic effect to 60 mg. (1 gr.) of codeine. Onset of significant analgesia usually occurs within 15 to 30 minutes. Analgesia is usually maintained for 3 hours or longer.
- **Tolerance not a problem:** tolerance to the analgesic effect of Talwin Tablets has not been reported, and no significant changes in clinical laboratory parameters attributable to the drug have been reported.
- **Dependence rarely a problem:** during three years of wide clinical use, only a few cases of dependence have been reported. In prescribing Talwin for chronic use, the physician should take precautions to avoid increases in dose by the patient and to prevent the use of the drug in anticipation of pain rather than for the relief of pain.
- **Not subject to narcotic controls:** convenient to prescribe – day or night – even by phone.
- **Generally well tolerated by most patients:** infrequently cause decrease in blood pressure or tachycardia; rarely cause respiratory depression or urinary retention; seldom cause diarrhea or constipation. If dizziness, lightheadedness, nausea or vomiting are encountered, these effects tend to be self-limiting and to decrease after the first few doses. (See last page of this advertisement for a complete discussion of adverse reactions and a brief discussion of other Prescribing Information.)

50 mg. Tablets

Talwin®

brand of

pentazocine (as hydrochloride)

the long-range analgesic

a new outlook in chronic pain

of moderate to severe intensity

Contraindications: Talwin, brand of pentazocine (as hydrochloride), should not be administered to patients who are hypersensitive to it.

Warnings: *Head Injury and Increased Intracranial Pressure.* The respiratory depressant effects of Talwin and its potential for elevating cerebrospinal fluid pressure may be markedly exaggerated in the presence of head injury, other intracranial lesions, or a preexisting increase in intracranial pressure. Furthermore, Talwin can produce effects which may obscure the clinical course of patients with head injuries. In such patients, Talwin must be used with extreme caution and only if its use is deemed essential.

Usage in Pregnancy. Safe use of Talwin during pregnancy (other than labor) has not been established. Animal reproduction studies have not demonstrated teratogenic or embryotoxic effects. However, Talwin should be administered to pregnant patients (other than labor) only when, in the judgment of the physician, the potential benefits outweigh the possible hazards. Patients receiving Talwin during labor have experienced no adverse effects other than those that occur with commonly used analgesics. Talwin should be used with caution in women delivering premature infants.

Drug Dependence. There have been instances of psychological and physical dependence on parenteral Talwin in patients with a history of drug abuse and, rarely, in patients without such a history. Abrupt discontinuance following the extended use of parenteral Talwin has resulted in withdrawal symptoms. There have been a few reports of dependence and of withdrawal symptoms with orally administered Talwin. Patients with a history of drug dependence should be under close supervision while receiving Talwin orally.

In prescribing Talwin for chronic use, the physician should take precautions to avoid increases in dose by the patient and to prevent the use of the drug in anticipation of pain rather than for the relief of pain.

Acute CNS Manifestations. Patients receiving therapeutic doses of Talwin have experienced, in rare instances, hallucinations (usually visual), disorientation, and confusion which have cleared spontaneously within a period of hours. The mechanism of this reaction is not known. Such patients should be very closely observed and vital signs checked. If the drug is reinstituted it should be done with caution since the acute CNS manifestations may recur.

Usage in Children. Because clinical experience in children under 12 years of age is limited, administration of Talwin in this age group is not recommended.

Ambulatory Patients. Since sedation, dizziness, and occasional euphoria have been noted, ambulatory patients should be warned not to operate machinery, drive cars, or unnecessarily expose themselves to hazards.

Precautions: *Certain Respiratory Conditions.* Although respiratory depression has rarely been reported after oral administration of Talwin, the drug should be administered with caution to patients with respiratory depression from any cause, severe bronchial asthma and other obstructive respiratory conditions, or cyanosis.

Impaired Renal or Hepatic Function. Decreased metabolism of the drug by the liver in extensive liver disease may predispose to accentuation of side effects. Although laboratory tests have not indicated that Talwin causes or increases renal or hepatic impairment, the drug should be administered with caution to patients with such impairment.

Myocardial Infarction. As with all drugs, Talwin should be used with caution in patients with myocardial infarction who have nausea or vomiting.

Biliary Surgery. Until further experience is gained with the effects of Talwin on the sphincter of Oddi, the drug should be used with caution in patients about to undergo surgery of the biliary tract.

Patients Receiving Narcotics. Talwin is a mild narcotic antagonist. Some patients previously receiving narcotics have experienced mild withdrawal symptoms after receiving Talwin.

CNS Effect. Caution should be used when Talwin is administered to patients prone to seizures; seizures have occurred in a few such patients in association with the use of Talwin although no cause and effect relationship has been established.

Adverse Reactions: Reactions reported after oral administration of Talwin include *gastrointestinal:* nausea, vomiting; infrequently constipation; and rarely abdominal distress, anorexia, diarrhea. *CNS effects:* dizziness, lightheadedness, sedation, euphoria, headache; infrequently weakness, disturbed dreams, insomnia, syncope, visual blurring and focusing difficulty, hallucinations (see *Acute CNS Manifestations* under WARNINGS); and rarely tremor, irritability, excitement, tinnitus. *Autonomic:* sweating; infrequently flushing; and rarely chills. *Allergic:* infrequently rash; and rarely urticaria, edema of the face. *Cardiovascular:* infrequently decrease in blood pressure, tachycardia. *Other:* rarely respiratory depression, urinary retention.

Dosage and Administration: *Adults.* The usual initial adult dose is 1 tablet (50 mg.) every three or four hours. This may be increased to 2 tablets (100 mg.) when needed. Total daily dosage should not exceed 600 mg.

When antiinflammatory or antipyretic effects are desired in addition to analgesia, aspirin can be administered concomitantly with Talwin.

Children Under 12 Years of Age. Since clinical experience in children under 12 years of age is limited, administration of Talwin in this age group is not recommended.

Duration of Therapy. Patients with chronic pain who have received Talwin orally for prolonged periods have not experienced withdrawal symptoms even when administration was abruptly discontinued (see WARNINGS). No tolerance to the analgesic effect has been observed. Laboratory tests of blood and urine and of liver and kidney function have revealed no significant abnormalities after prolonged administration of Talwin.

Overdosage: *Manifestations.* Clinical experience with Talwin overdosage has been insufficient to define the signs of this condition.

Treatment. Oxygen, intravenous fluids, vasopressors, and other supportive measures should be employed as indicated. Assisted or controlled ventilation should also be considered. Although nalorphine and levallorphan are *not* effective antidotes for respiratory depression due to overdosage or unusual sensitivity to Talwin, parenteral naloxone (Narcan®, available through Endo Laboratories) is a specific and effective antagonist. If naloxone is not available, parenteral administration of the analeptic, methylphenidate (Ritalin®), may be of value if respiratory depression occurs.

Talwin is not subject to narcotic controls.

How Supplied: Tablets, peach color, scored. Each tablet contains Talwin (brand of pentazocine) as hydrochloride equivalent to 50 mg. base. Bottles of 100.

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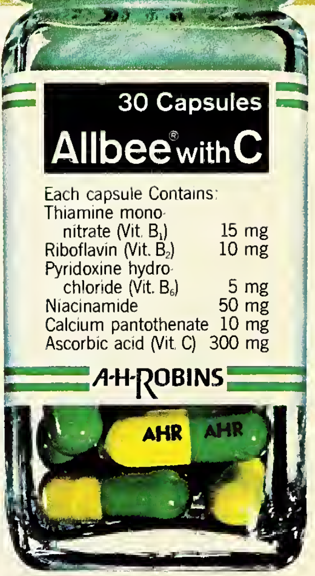
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atropine sulfate	0.0194 mg.	0.0194 mg.	0.0582 mg.
hyoscine hydrobromide	0.0065 mg.	0.0065 mg.	0.0195 mg.
phenobarbital	(¼ gr.) 16.2 mg.	(½ gr.) 32.4 mg.	(¾ gr.) 48.6 mg.
(warning: may be habit forming)			

Brief summary. Side effects: Blurring of vision, dry mouth, difficult urination, and flushing or dryness of the skin may occur on higher dosage levels, rarely on usual dosage. Administer with caution to patients with incipient glaucoma or urinary bladder neck obstruction as in prostatic hypertrophy. Contraindicated in patients with acute glaucoma, advanced renal or hepatic disease or hypersensitivity to any of the ingredients.

A. H. ROBINS COMPANY, RICHMOND, VIRGINIA 23220

A·H·ROBINS

Trying to get doctors? Consider the family, WA-SAMA urges

Recognizing the influence of the wife as an important factor in the decision about where doctors practice, the Woman's Auxiliary to SAMA has sent a set of new recommendations to the MD Placement Service of the Michigan Health Council and similar organizations across the nation.

The results of a recent WA-SAMA survey about placement services led to this statement: "We believe that many families would look farther afield if they could easily obtain information about physician openings elsewhere.

"Community profiles must be available," declares Mrs. Jerrald Kuenn, York, Pa., WA-SAMA president.

Mrs. Kuenn writes, "because time is short and schedules are busy, the principle of intertia operates and families tend to consider only those areas already familiar to them—home towns, areas of medical training, or areas in which they have previously lived or vacationed."

WA-SAMA is urging some standardization of information and points out that only relevant information should be sent by placement bureaus when doctors inquire.

Thirty-eight states, including MSMS, participated in the recent WA-SAMA survey.

Doctor—Are you tired of being blamed for the rise in health care costs?

Your medical society needs facts and figures to answer these allegations.

Under the direction of the Socio-Economic Committee the Bureau of Economic Information is conducting its second annual physicians' overhead costs survey. The first was conducted in the spring of 1971 and its results reported in the November issue of *Michigan Medicine.*

When you receive the 1972 Physicians' Overhead Cost Survey (approximately April 18) please complete it and return it to MSMS immediately. Your society wants to help you. We need your help *now.*

New labor handbook predicts large increase in types of health jobs

"Manpower needs in health services will continue to show rapid growth, largely because of population growth and the increasing ability of people to pay for health care."

So states the recently-published 1972-73 edition of the Department of Labor's *Occupational Outlook Handbook.* The 900-page book provides career information about 800 occupations.

The journal of the National Education Association recently summarized the book and wrote in part:

"The professions will be the fastest-growing occupations during this decade. By 1980, the demand for professional, technical, and kindred workers may be about 40 percent greater than in 1970 as the nation puts greater efforts into socioeconomic progress, urban renewal, transportation, harnessing the ocean, and enhancing the beauty of the land.

"Most types of jobs in health work are expected to increase rapidly. The outlook for doctors and dentists as well as for dental assistants, physical therapists, medical lab workers, dietitians, trained hospital administrators, veterinarians, pharmacists, and nurses is very good for the 70's.

"Licensed practical nurses are expected to be in strong demand during the years ahead. Some states accept candidates who have completed only the eighth or ninth grade; other states require a high school education. Training is offered in many high schools, junior colleges, health agencies, and private educational institutions.

"Along with the demand for greater education, the proportion of youth completing high school has increased, and an even larger proportion of high school graduates pursue higher education. This trend will continue. In 1980, high school enrollment is expected to be 21.4 million—7 percent above the 1970 level. College degree credit enrollment is projected at 11.2 million—about 48 percent higher than the 1970 level.

"The number of persons in the labor force is a related aspect of job competition. The number of all workers and job seekers will increase about 17 percent by 1980, and young men and women between the ages of 16 and 34 will account for about four-fifths of the net increase. Thus, in the 1970's the number of young workers will increase and these workers will have more education on the average than new entrants of previous years."

New procedure to speed processing SS disability claims

By David P. Gage, MD
Chief Medical Consultant
Disability Determination Service
State Division of Vocational Rehabilitation

When your patient applies for Social Security disability benefits, his claim will be processed much faster thanks to a new procedure called *Simultaneous Development*, now being used at the State Agency.

Formerly, to provide initial medical data, you received a four page general medical form sent by the local Social Security office. Now, the state agency medical staff initiates an inquiry tailored when possible to your patient's major impairment(s)—hypertension, coronary disease, diabetes, arthritis. Second requests for additional information and costly time-consuming additional examinations are much reduced by this method.

It is already apparent that the physicians of Michigan will be saved much time and paperwork. Disability claims, now approximately 60,000 yearly, will be speeded, to the advantage of the applicants.

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Detroit health teams searching out children with lead poisoning

In the second phase of a detection and treatment project, teams from the Detroit Health Department are making follow-up visits to city homes with high lead paint-poisoning risk.

The first phase of the project was a survey to discover neighborhoods where high lead levels occur in the house paint and where there are a high proportion of children ages one to five. During the second phase, the teams will urge parents of those children most likely to have eaten the paint to take their young children to a health center for further examination.

If laboratory findings indicate high blood lead levels, the child is treated as an emergency case and is immediately referred for hospitalization. Regine Aronow, MD, of Children's Hospital and Filomena Farooki, MD, of Detroit General Hospital are working closely with the health department teams.

U-M interns, residents still waiting word from Supreme Court

At the time this issue went to press, members of the University of Michigan Interns-Residents Association still were waiting for the Michigan Supreme Court's decision on whether to accept the association's appeal of the decision that the interns and residents do not constitute a bargaining unit.

If the Supreme Court decides to hear the appeal, the interns and residents, together with the Michigan Employment Relations Commission, will present briefs and oral arguments in their case with the University of Michigan.

The State Court of Appeals on Jan. 21 ruled that the university need not bargain with the intern-resident association as the interns and residents are not public employes within the meaning and intent of the law.

The MERC earlier had ruled in favor of the interns and residents, who have been seeking bargaining rights at the U-M Medical Center since early 1970.

In small doses

T. B. Coles, Jr., MD, Detroit,
is currently president of the Alumni Association of the University of Michigan Program in Hospital Administration. Doctor Coles also is associate director of the Grace Hospital, Detroit and is one of more than 200 graduates of the U-M program who serve in administrative positions throughout the U.S.

Robert H. Gregg, MD, Detroit,
is new president and member of the board of trustees for Children's Hospital. Doctor Gregg has been associate pediatrician-in-chief of the hospital since 1961, and succeeds Hugo V. Hullerman, MD, who retired after 15 years of service as executive vice president.

Herbert E. Hamel, MD, St. Ignace,
has retired after nearly eighteen years as cubmaster of the St. Ignace Cub Scout Pack No. 127. Doctor Hamel has received many scouting awards and in 1965 was St. Ignace Kiwanis Man of the Month and received the St. Ignace Fire Department's Outstanding Service Award in 1967 for his scouting activities.

Michigan authors

Stanley H. Schuman, MD, DrPH, Donald C. Pelz, PhD, Ann Arbor, "Hostility Factors in Dangerous Driving: Evidence for the Design of Countermeasure Programs," page 5, *California Medicine,* Feb. 1972.

Martin Lloyd Norton, MD, Ann Arbor, "Law and the Inhalation Therapist," page 18, *Airway,* the Journal of the Michigan Society for Inhalation Therapy, December, 1971.

Walter P. Work, MD, Ann Arbor, "The American Board of Otolaryngology," page 39, *Bulletin of the American College of Surgeons,* February, 1972.

Frank L. Morton, MD, Ann Arbor, "A county health department's role in drug programs," page 1069, *HSMHA Health Reports,* December, 1971.

William H. Harrison, MD, Lansing,
was guest of honor at the "W. H. Harrison Day" dinner Feb. 27 at the Olds Plaza Hotel in Lansing. Sponsors of the event recognizing Lansing's first black physician were the "Complete Black Community of Lansing." Doctor Harrison is a graduate of Howard University medical school and is treasurer of the Ingham County Medical Society. He is also board president of the Lansing Housing Foundation of Model Cities and a member of the staffs of Sparrow, St. Lawrence and Ingham Medical Hospitals in Lansing.

John R. Rodger, MD, Bellaire,
has been honored with the naming of the local elementary school after him. The building was formally dedicated Feb. 20 in his name for the role he has played in education and community affairs. Doctor Rodger served 12 years as president of the Bellaire Board of Education, and also led the county and intermediate school boards. He received a "Citizen of the Year" award in 1967 from Gov. George Romney. Doctor Rodger is also a former member of the MSMS House of Delegates and alternate delegate to the AMA. He has been a member of the MSMS and AMA committees on highway safety and was chairman of the MSMS Rural Health Committee for several years.

Edward D. Sage, MD, Kalamazoo,
was recently honored by the Michigan Legislature when it passed a resolution on the occasion of his retirement after completing 66 years of medical practice. The resolution, offered by Representatives Sackett and Weber, cited Doctor Sage's achievements and dedication to the people of Kalamazoo and conveyed best wishes for a happy and well-earned retirement.

Clayton K. Strop, MD, Flint,
has forwarded information and materials on alcoholism to Nickolas Nemirovich, external relations officer of the Polytechnical Museum of Moscow, Soviet Russia. Doctor Strop, with the Group Therapy Department of Hurley Hospital, Flint, received a request for the information from Mr. Nemirovich.

Emanuel Tanay, MD, Detroit,
was invited to address the Subcommittee on Criminal Laws and Procedures of the U. S. Senate Committee on the Judiciary on Feb. 17. The subject of the hearing was homicide and firearms. Doctor Tanay is associate professor of psychiatry and law at the Wayne State University.

In memoriam

William Bromme, MD
Grosse Pointe

A former MSMS Council chairman and alternate delegate to the AMA House, William Bromme, MD, died Feb. 9 at the age of 65.

Doctor Bromme had practiced 45 years in the Detroit area and was affiliated with Woman's, Grace and Veteran's hospitals there. Doctor Bromme was a urologist and was a graduate of the University of Michigan.

Doctor Bromme was past president of the Detroit Urological Society, a trustee of the Michigan Cancer Foundation, a member of the North Central Section of the American Urological Association and the American College of Surgeons, as well as various medical organizations.

Harrison S. Collisi, MD
Grand Rapids

A past president of the Kent County Medical Society and former chief of staff at Butterworth Hospital, Grand Rapids, Harrison S. Collisi, MD, died Feb. 3 at the age of 83.

Doctor Collisi had been manager of the Crile VA hospital in Cleveland, the Erie, Pa., VA hospital and the VA hospital in Livermore, Calif., since leaving Grand Rapids in 1942. He was winner of the Bronze Star for service in France during World War II.

Doctor Collisi was a graduate of the University of Michigan Medical School and practiced 30 years in Grand Rapids, specializing in obstetrics and gynecology. He was one of the earliest advocates of birth control and was a member of the American College of Surgeons, the American Hospital Association and the American College of Hospital Administrators.

John Buttrey Engel, MD
Detroit

John Buttrey Engel, MD, Detroit specialist in industrial medicine, died Jan. 15 at the age of 72. He was a graduate of Wayne State University School of Medicine.

Rhoda P. Farquharson, MD
Detroit

Rhoda P. Farquharson, MD, reportedly the oldest practicing female physician in Michigan, died Feb. 23 at the age of 89.

Doctor Farquharson had been the first woman intern at Grace Hospital, the first woman physician for the Juvenile Court in Detroit and the first woman physician for the Women's House of Correction in Detroit.

Doctor Farquharson served on the federal parole board and was an instructor in the prenatal clinic of the Wayne Medical College. From 1929 to 1968, she maintained a private practice.

Simon O. Johnson, MD
Detroit

Long-time Detroit psychiatrist Simon O. Johnson, MD, died Feb. 20 at the age of 75.

Doctor Johnson was a former chairman of the Section of Psychiatry of the National Medical Association and from 1958 to 1968 was consultant to the Michigan Department of Mental Health.

A graduate of the Boston University School of Medicine, Doctor Johnson was affiliated with the Detroit Consultation Center, the Lapeer State Home and Training School and the Plymouth State Home and Training School.

Doctor Johnson was a fellow of the American Psychiatric Association, and a member of the Academy of Psychosomatic Medicine, the American Association for the Advancement of Science, the Menninger Foundation and the American Association of Military Surgeons.

James E. Kermath, MD
Grosse Ile

James Edward Kermath, MD, vice chief of staff at Oakwood Hospital, Dearborn, died Feb. 15 at the age of 40.

Doctor Kermath was former chief of surgery at Outer Drive Hospital, Lincoln Park, and was president of the Grosse Ile Community and Youth Center. He was a graduate of the University of Michigan Medical School and was a surgeon.

Frederick E. Kolb, MD
Calumet

Frederick E. Kolb, MD, Calumet generalist, died Jan. 19 at the age of 62.

Doctor Kolb was affiliated with Calumet Public Hospital in Laurium and St. Joseph's Hospital in Hancock. He was a past president of the Houghton-Baraga-Keweenaw Medical Society. Doctor Kolb was a graduate of the Northwestern University medical school.

Thomas H. Miller, MD
Detroit

Thomas H. Miller, MD, emeritus associate professor of dermatology at Wayne State University, died Feb. 22 at the age of 71.

Doctor Miller was a graduate of the University of Michigan Medical School and was president of the Detroit Dermatological Society in 1937.

Dayton H. O'Donnell, MD
Bloomfield Township

Dayton H. O'Donnell, MD, a member of the staff of Southfield's Providence Hospital, died Feb. 6 at the age of 69.

Doctor O'Donnell was a graduate of St. Louis University medical school.

L. G. Rowley, MD
Phoenix

Laurie Guy Rowley, MD, former chief of staff at Oakland County Hospital, died Jan. 28 at the age of 77. Doctor Rowley had practiced in Oakland county for 39 years before retiring in 1969 to Phoenix, Ariz. He was former medical director of the county infirmary.

Doctor Rowley was a graduate of Nebraska State College of Medicine and was also affiliated with Henry Ford Hospital and Pontiac General Hospital. He was a generalist.

Isaac S. Schembeck, MD
Detroit

Isaac S. Schembeck, MD, Detroit, long-time otolaryngologist with Harper Hospital, died Feb. 23 at the age of 78.

A native of Nebraska, Doctor Schembeck was a graduate of the University of Nebraska medical school. He was a member of the Detroit Ophthalmologic Society.

Robert L. Schaefer, MD
Detroit

Robert L. Schaefer, MD, leading Midwestern endocrinologist, died Feb. 17 at the age of 79. Doctor Schaefer had given most of his medical service in Detroit, but also practiced in New York City in 1932 and 1933.

Doctor Schaefer was a graduate of St. Louis University and received an honorary doctor of science degree from the University of Detroit in 1949. He was certified by the American Board of Internal Medicine in 1937.

Doctor Schaefer was a member of the Endocrine Society, the American Diabetic Association and the American Society for Clinical Pharmacology and Therapeutics.

Walter K. Whitehead, MD
Harper Woods

Walter Kellogg Whitehead, MD, Harper Woods internist, died Feb. 13 at the age of 69.

Doctor Whitehead was a graduate of the University of Michigan Medical School and was affiliated with Harper Hospital, and Cottage Hospital in Grosse Pointe. He belonged to the American Heart Association, the Michigan Society of Internal Medicine, the American Association for the Advancement of Science, the American Trudeau Society and the Endocrine Society.

Macomb lists medical practices open to new patients

The Macomb County Medical Society has completed a survey of its members which indicates the number of local practices still open to new patients. Questionnaires were mailed to 235 member physicians, and 119 were returned completed.

The results show 10 pediatric practices open, none closed; 17 ob-gyn practices open, one closed; 16 general practices open, five closed; 16 internal medicine practices open, six closed; 13 general surgery practices open, none closed, and 33 other specialties open with two closed.

Other results revealed an approximate waiting time of one week for an appointment with a pediatrician; one week with an obstetrician-gynecologist; two days for a general practitioner; two weeks for an internist, a few days for a general surgeon and a few days to one week for other specialties.

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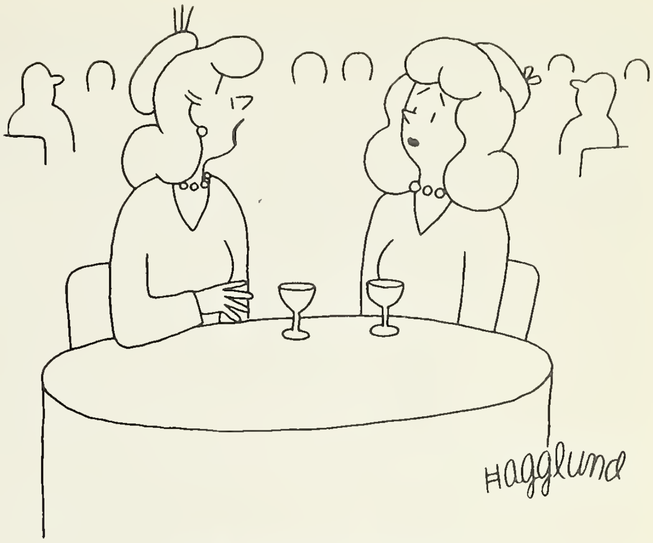

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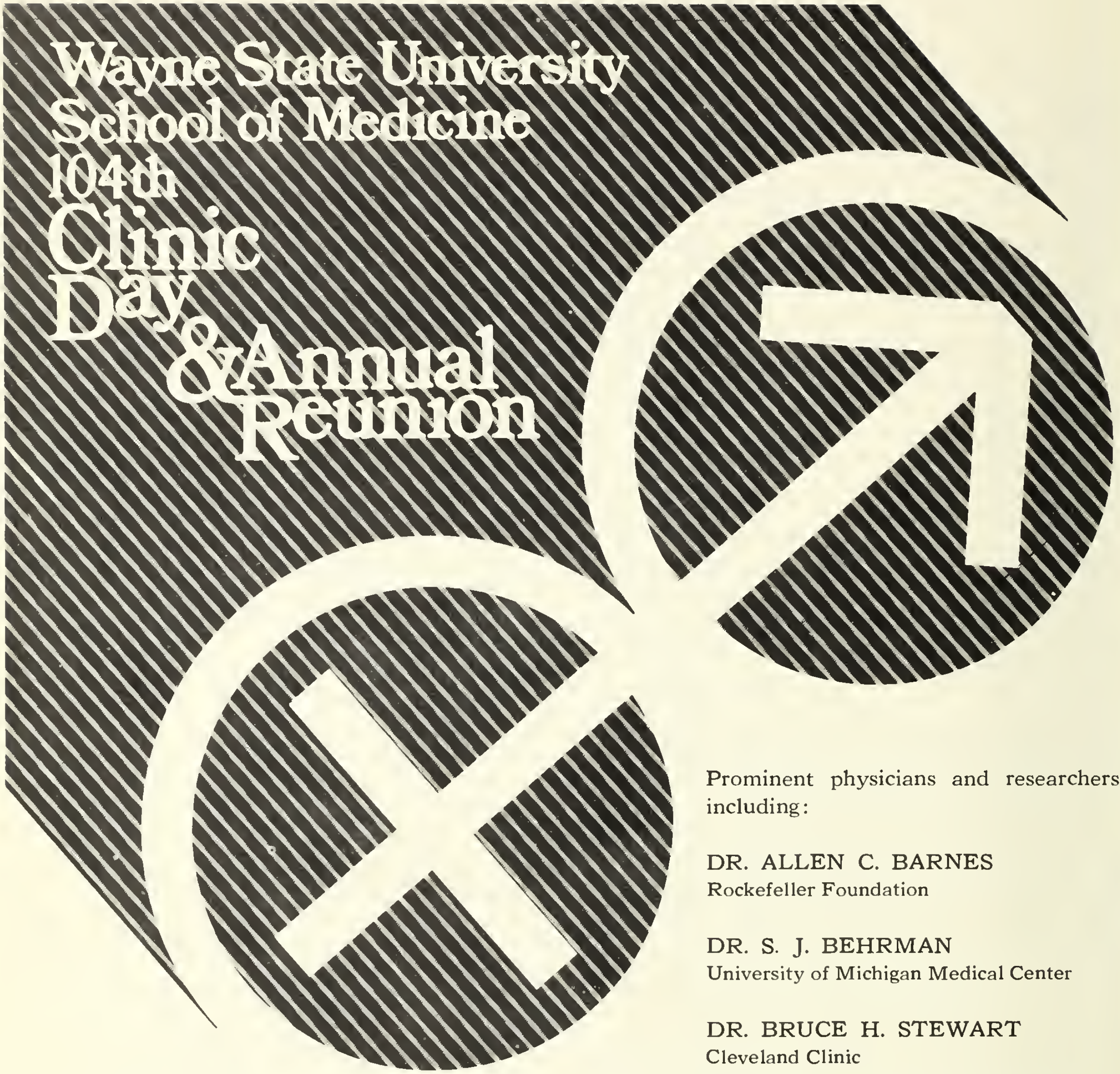

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Wayne State University School of Medicine

Sound Off

Many foreign MDs now coming to U.S.; medicine is better

By John J. Coury, MD
MSMS President-elect

One of my physician friends the other day said he had compared the names of the doctors who were listed on the "New Member Page" in *Michigan Medicine* with the names of the doctors listed in the "In Memoriam Section."

If you have done this you would have ample proof that many, many new physicians and new MSMS members in Michigan are foreign-trained.

There are about 700 of these in Michigan now on limited license to practice because they are not citizens. About 300 foreign-trained physicians each year in recent years obtained full, regular licenses. Many of them join their component medical societies, MSMS and the AMA. We are pleased.

The major reason why many foreign doctors come to the United States is because of the scientific climate and high standards of medical practice.

In many countries over-regulated conditions have served to stymie scientific inquiry. Stimulation is missing. And without stimulation medical advances suffer.

Ever since World War II the young foreign physicians have been coming to the United States because our nation is in the forefront of medicine. These foreign-trained doctors want both to improve their education and medical skills and they want freedom to practice their profession.

How can I prove that medicine is better in the States? Well, for example, 23 Americans have been awarded the Nobel Prize in medicine and physiology since World War II. That's more than were won by physicians and scientists from all the other countries of the world combined.

In the same period, well over half of all the major new drug discoveries were developed in this country.

And during this period, America has constructed 750 new hospitals while England has built one.

Doctor Coury

Doctor Hardwick

The death rate from cancer in America is well below the rate of Western Europe.

That is true also for tuberculosis, pneumonia, strokes, and influenza. All of these kill fewer people, per capita, than in Western Europe.

When it comes to teaching and applying medical knowledge, the rest of the medical world looks to the United States now for leadership.

Needed: theoretical basis for national health plans

By C. T. Hardwick, PhD
MSMS Economic Consultant

Nature of Presentation

Americans do not tend to be entranced with theory or ideological propositions. No, in many instances it is truthfully observed that Americans are practical people. We want to know—does it work or will it solve a problem now at hand. We are impatient with theory or philosophy which seems to be reviewed from pragmatic happenings.

In the socio-economic arena dealing with problems that even have political dimensions, like health, we seem to have no choice of ignoring the relationship between theory and practices. The test is not separating but synthesizing the two dimensions.

For example, it does little good to classify theories or propositions as "liberal" because the meaning has been changing and often means different things at different times. A short review of history reveals that those who called themselves liberal during the early part of the century stood for individualism, independence, and freedom from government controls. Since the days of the New Deal and the 1930's, the liberals have been proposing more and more government take over of socio-economic plans in the name of humanity.

Even if labels of theories seem to mean less than desirable, it is not easy to ignore the usefulness of philosophical guidelines before practice plans are embraced. In other words when we have several choices between socio-economic proposals, we often have to return to some basics to help us make the selection.

At the present time, there are some National Health Plans being proposed in the National Congress as solutions to present health problems. The sponsors are characterized as liberals, conservatives, radicals, and protectors of current practices. In this presentation, it is contended that these labels do not help us in our selection process. Therefore, as an alternative, we will present some philosophical propositions to help us in our selection.

Some Guidelines to Judge National Health Plans

Of course in developing these guidelines, we are assuming a firm belief in the evolving American way of life. Our presentation is against a revolution in health care. It aims at maintaining the strengths of the American way but still encouraging change in the areas of weakness.

The suggested guidelines are as follows:

1. Retail responsibility of essential payment for health services in the private sector for those able to pay.
2. Let government assume the burden of paying for those unable to pay the cost of services.
3. Channel the individual and government payments via the private insurance plans so as to share the risks.
4. Maintain and encourage the dual system so that the public and private systems will compete.
5. Establish a professional peer review system as a motivator toward higher quality health care.
6. Encourage the experimentation in the pluralistic delivery system such as solos, partnerships, groups, HMOs, and hospital salaried health services.
7. Develop new linkage between public and private practices especially in the neglected rural and ghetto areas.

It is suggested that interested parties take these guidelines and check out the following several national health plans:

1. Kennedy-Griffiths
2. Ameriplan
3. Nixon or Administrative Plan
4. Scott-Percy
5. Burlesur/HIAA
6. Medicredit/AMA
7. Javits Plan

Making the Choice

If you do not like those items listed as guidelines, develop your own list and then check the National Plans against such self determined criteria.

If we first developed the philosophical base, we should make a more intelligent choice of preference—one we are willing to support and make work.

In keeping with American tradition, all segments of the society should be heard from, e.g., labor, poor, management, professional, consumers, rural, urban, old, young, organized, and unorganized.

Our preference should be made known to our legislators and backers, and the ultimate compromise should be better than the plan of any one group not tuned to public wishes.

Any plan involving new experiments in delivery will upset some people but we must keep searching for new answers to our new problems and new aspirations in the health field. The new programs may be no more perfect than old programs, but our belief in progress and improvement has to include the health field. Let us work to prove that the creative American will not copy some other health program but will work out his own better way.

Michigan needs to establish an RVS now

By Mark C. Levine, MD
Flint

> *"All animals are equal except that some are more equal than others."*
> *George Orwell: ANIMAL FARM*

Prior to the second World War, most Americans received medical care at the hands of their family doctor, who, but for the rarest exception, was invariably a general practitioner. The few specialists

Doctor Levine

around were either found on the faculties of medical schools, or the rare multi-disciplinary clinic (such as the Mayo Clinic); if in private practice, their offices were fashionably located (as on Fifth Avenue in New York City). Under these circumstances, there was never a question of the usual or customary fee for medical care being other than that charged by the usual family practitioner in his community.

With World War II came the era of sophisticated technology, culminating in the nuclear age. The march of technology did not spare the field of medicine; as the art of medicine rapidly gave way to the science of medicine, as the revered image of the gentle family practitioner was replaced with the more authoritarian, impersonal and precise approach of the specialist, so began the changes in the relationship of the medical profession to society in general.

In recent years, the increasing intervention of third parties, including governmental agencies at all levels, and also private insurance companies (to say nothing of the peculiar status of Blue Cross-Blue Shield) in all phases of medical care, has placed all these problems on public display. When it became apparent to third parties, and particularly to the federal government, that medical care for the elderly and indigent was expensive, there began the rush to secure a fee schedule which could be applied by all third parties to all physicians.

Traditions in medicine die hard, and therefore while most physicians trained in medical or surgical specialties have tended to establish fee schedules for procedures limited to their own area, no one has really challenged the traditional concept that where procedures are done by more than one kind of physician (general practitioner, specialists of one or more disciplines), the fee paid by the third party should be the same.

Many specialists circumvented the issue by simply charging what they felt was the value of their services for a particular procedure, and really did not concern themselves too much with the amount paid by the third party even if it was no more than the fee allowed another physician without special training. Perhaps specialists have not pushed the issue to avoid offending their referral sources, (in many cases general practitioners), even though they did feel that the additional time and expense of post-graduate training, and the presumed additional skills acquired thereby, seemed to justify high remuneration.

But now that third parties are demanding that whatever benefit is allowed be accepted as full payment for the service rendered, the question of equal fee for equal service must now be faced by all physicians irrespective of their training or method of practice. While the concept has been upheld by local, state, and national medical societies in the past, it has now been challenged openly by the Michigan Society of Internal Medicine, and all specialists must face the issue in open debate.

There are few precedents throughout the world upon which to base a position. In Quebec, the Society of Medical Specialists argued successfully that such a concept was invalid, and now there is a differential fee schedule in the Provincial Medicare Act. Under government health schemes throughout the world, the specialist occupies a very different position in that he is a salaried, hospital-based physician as opposed to the general practitioner, who usually does not have hospital privileges and is paid on a capitation basis or according to a rigid fee schedule. It is interesting that in England, where the National Health Service does permit physicians to "opt out" and accept private patients at whatever fee they want to charge, many specialists have found an increasing demand for private medical care.

It could be argued that the fairest way of handling relative values in terms of fees would be to place an hourly rate on the work of all physicians. This would take care of most of the problems of specialists who invariably spend more time with each patient than do physicians who see 50 to 100 patients per day in their offices. Opponents might claim that if a physician worked at a fixed hourly rate, there might be foot-dragging to pad bills, but the strong incentive of most physicians to finish their work to permit a little leisure time, would easily negate such accusations.

The most important criterion of qualification today is board certification, and any differential fee schedule would have to be based on certification by a national specialty board. Of course, it would be unfair to expect some individuals who had never got around to taking their board examinations to settle for a lower fee scale after many years in practice. However, while some sort of "grandfather clause" might have to be worked out, it must be kept in mind that many specialists who submitted to the ordeal of certification examinations were at least partly motivated by the realization that this situation eventually might come to pass.

Mrs. Schoff

The auxiliary is there to help you, Doctor

By Mrs. Charles Schoff
President, MSMS Auxiliary

Doctor, do you have a problem life?

A problem wife?

Let the woman's auxiliary come to your aid. Our avowed purpose is to help you, singly and collectively.

County auxiliaries plan parties, to add a little spice and recreation to your life.

Members help you conduct clinics; collect medicines you can't use and haul them to centers so they can be send around the world; set up drug abuse programs; pinch-hit for you when you're too busy to man a careers booth . . . some even arrange entire career days to encourage young people into the medical field; see that your patient gets hot meals at home once a day; write letters for you to your legislator; work hard to educate people about preventative medicine and, if all this isn't enough, they gladly take on any task your medical society suggests.

How does this help you, if you have a problem wife?

Obviously, it keeps her busy.

And if your problem is that she's too busy to stay home, the auxiliary has a solution to that, too. She can sit and sew for your AMA-ERF. Some of the women make beautiful ties which are sold and the money all goes into the AMA-ERF fund. They make other things, too. And they can buy beautiful gift items for you from their project chairmen, adding even more to the fund.

You really can't afford NOT to have your wife join the county auxiliary, Doctor. It's the only place she'll find where the other girls have the same trouble serving meals on time or answering the telephone and can compare notes on living with a lovable perfectionist.

While board eligibility can never be equivalent to board certification, we must consider those individuals who oppose any form of examination and who maintain that having completed their training and/or practice requirements, they must be equal in competence to those who have added a paper certificate by demonstrating this competence by a written and/or oral exam. There are also fine general practitioners who are upset with the whole concept of a specialty board of family practice and who argue that if they wanted to be specialists they would have taken such training in the first place. But this is a world where pragmatism must prevail, where accommodations and compromises are necessary, and where a decision must be made now on producing a fee schedule of some sort for the third parties who pay the vast majority of the bills for personal medical care in the United States.

Thus, the following is proposed:

All specialty groups, preferably at a state level, must evaluate the absolute and relative values of their services in clearly defined manner. It is a foolish sentimentality, an anachronism of the nuclear and computer age, to insist that *all* physicians can deliver *all* forms of medical care in an equal manner irrespective of training. Today's specialists, who now outnumber general or family practitioners by almost two to one at a national level, will not accept "equal fee for equal service" after spending several years in post-graduate study and then sitting board examinations.

We cannot accept the precept that eligibility is equivalent to certification in a specialty, until the specialty societies abolish certification examinations in favor of a comprehensive in-training examination to insure that no one is allowed to complete his or her post-graduate study until a certain level of competence has been achieved. It is likely that the value of services per hour would be roughly equivalent for most board certified physicians; very few would object to the concept that a physician certified in Family Practice is worth less per hour than one certified in one of the more traditional specialties. Of course, the inclusion of surgeons, radiologists, or pathologists into an hourly rate might be a little controversial, but nonetheless does have merit.

State or national medical societies are asking for trouble if they expect to impose a relative value scale applicable to the fees of every physician, while retaining the concept of "equal fee for equal service." Compromises will have to be made between different groups of individuals who perform similar or identical services, so that some degree of uniformity is achieved. But the time for a Michigan Relative Value Scale has come, and it must be established in the least divisive manner as soon as possible.

(Doctor Levine's article is a condensation of his editorial printed in the January issue of the Genesee County Medical Society Bulletin. It is reprinted here with permission.)

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EDIGRAMS

ATE NEWS FROM THE MICHIGAN STATE MEDICAL SOCIETY

Michigan Medicine

April 20, 1972, Volume 71, Number 12
Michigan State Medical Society
Reading Time: 2 Minutes, 25 Seconds

OST YOUR SIGN, DOCTOR . . . Internal Revenue Service is conducting a pot-check of physician offices in Michigan and throughout the nation to etermine that physicians are complying with Economic Phase II regulation alling for (1) a sign stating that a list of the physician's fees is vailable on request, and (2) that the list is actually available for nspection. A number of doctors in Michigan have indicated IRS has visited hem, and have warned that such visits tend to create fear among the office taff, disrupt the office practice, and encroach on the physician's right o practice medicine. AMA Legal Counsel has been consulted, and advises hat the regulation provides that "the public" may ask at any time to eview the doctor's fees. AMA says the term, "the public" is ill-defined, ut should be considered to mean (1) the IRS, (2) those people who have stablished a patient relationship with the physician, and (3) those people ho are legitimate prospective patients. AMA advises a hard line showing he fee list to anyone who does not fit these three categories. MSMS is nterested in how many such requests doctors are receiving. Please advise ruce Ambrose, manager, MSMS Dept. of Government Relations, when and if ou receive such requests from IRS or others. A copy of the suggested ign to post was printed by MSMS in the February issue of Michigan Medicine on page 184.

APRIL 28 IS THE DEADLINE for MSMS members to return the AMA membership opinion poll sent by the AMA on April 1. This is an unprecedented move to seek the opinion of members on questions to help guide the AMA Board of Trustees and House of Delegates. Please fill in your questionnaire, and share your views with the MSMS delegates and alternates to the AMA. (See Doctor Master's message in "Sound Off" feature in May Michigan Medicine.)

MSMS COMMITTEE on Planning and Priorities met April 19 in two work groups to study the Phase II Report of MSMS member opinions, as completed by the Alexander Grant Company in March. The MSMS House of Delegates March 20-21 referred the report to the Planning and Priorities Committee for evaluation. Study Group A, led by Ralph S. Green, MD, chairman, met to study physician opinions about MSMS member services and the Report recommendations. Study Group B, led by John J. Coury, MD, chairman, discussed member views about MSMS organization and committee structure.

INTERIM GUIDELINES and procedures have been sent by MSMS to component society presidents about handling possible requests that the National Health Services Corps assign physicians where there are critical shortages of health personnel. The presidents have been asked to send their evaluation of the procedures back to MSMS by April 20 for consideration April 26 by The Council. MSMS will not review applications until the component society has first determined the need and justification for requesting physician manpower.

PLEASE WATCH your mail for the 1972 Overhead Cost Survey which will be mailed in April to all members by the MSMS Bureau of Economic Information. The results will be compared to the results of the 1971 Survey and give MSMS solid figures showing trends, etc. "Respond, Respond" was the appeal voiced by Co-Editor Edward Tallant, MD, in a recent Detroit Medical News editorial.

MICHIGAN PHYSICIANS have a real opportunity to provide help for medical students who are seeking summer employment. In the SAMA-MECO (Student American Medical Association - Medical Education and Community Orientation) Program, MSMS has assisted in placing 89 students in Michigan hospitals for the summer of 1972. Forty students still would like to be placed or be offered summer employment related to medicine. If you can help arrange for additional SAMA-MECO places or suggest summer employment opportunities, please contact the MSMS Communications Department immediately.

ONLY BNDD OFFICIAL ORDER FORMS are valid effective May 1, 1972 for transactions involving Schedule I and II controlled substances. Practitioners can obtain new forms by forwarding old type IRS requisition (IRS Form 679) to BNDD Registration Branch, P.O. Box 28083, Central Station, Washington, D.C. 20005. Registrant's complete, nine-character BNDD number must be shown to be processed. Registrants who do not have an IRS requisition, and who desire the new order form, are required to complete Form BND 222D which can be obtained by writing to: Bureau of Narcotics and Dangerous Drugs, 357 Federal Bldg., 231 W. Lafayette, Detroit 48226.

SOME QUESTIONS have been directed to MSMS about the acceptance by component societies of federal funds. In September, 1968, the MSMS approved AMA guidelines subject to five conditions. One of the guidelines permits that a state or local medical society "may enter into agreements with government agencies to administer health care programs and to have the administrative costs of such programs financed from governmental funds." Other requirements involve "ethical precepts in the continuance of its (medical) role of responsible leadership." The MSMS Council added a proviso "that all programs involving direct use of government funds by component societies be presented to The Council for evaluation." A full text of the guidelines is available by writing MSMS Department of Government Relations.

FOUR PUBLIC FORUMS on Diabetes will be co-sponsored by the Michigan Diabet Association, MSMS, Wayne County Medical Society, and Oakland County Medica Society. The meetings will be at Oak Park High, 7:30, May 2; Ford World Headquarters, 7:30, May 4; Regina High School, Harper Woods, 7:30, May 10, and Temple Beth El on Woodward, 7:30, May 11. Medical society participati has been coordinated by the MSMS Department of Communications.

KEYNOTE ADDRESS at the annual state Woman's Auxiliary Legislative Day in Lansing April 19 was delivered by MSMS President-Elect John J. Coury, MD. The program also featured Louis R. Zako, MD, MDPAC chairman. The fifth annual legislative day covered current medical legislation and included a luncheon with legislators.

April 20, 1972 Vol. 71, No. 12

Michigan Medicine

MICHIGAN STATE MEDICAL SOCIETY

Published three times each month and four times in December and January, 38 issues, by the Michigan State Medical Society as its official journal. Second class postage paid at East Lansing, Mich. and at additional mailing offices. Yearly subscription rate, $9.00. Printed in USA. All communications should be addressed to the Publications Committee, Michigan State Medical Society, 120 West Saginaw Street, East Lansing, Michigan 48823.

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Phone: Area Code 517, 337-1351.

EDITOR: HERBERT A. AUER

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EDIGRAMS
ATE NEWS FROM THE MICHIGAN STATE MEDICAL SOCIETY

Michigan Medicine

April 28, 1972, Volume 71, Number 13
Michigan State Medical Society
Reading Time: 2 Minutes, 45 Seconds

Y A VOTE OF 96 to 6, the Michigan House of Representatives has passed ouse Bill 5883 to repeal the Basic Science Act. The bill now is before he Senate Committee on Health, Social Services & Retirement (Sen. Alvin eGrow, chairman) for further consideration.

MSMS COUNCIL DREW a fine line April 26 between services provided to minors without parental consent in adopting legislative positions on two bills. HB 5084, now before the Senate, would permit rendering of birth control services to minors without parental consent; HB 6106, in the House, would permit rendering of any service to minors without parental consent. Council accepted a Legal Affairs Committee recommendation that, "There are specific instances where physician services to minors without parental consent may be advisable (e.g., birth control, venereal disease, drug and alcohol dependence); but that general health matters are properly the concern of the parents." MSMS thus supports HB 5084, opposes HB 6106. Current statutes provide for allowing physician services without parental consent in cases of suspected venereal disease and drug dependence.

AYS TO INCREASE political activities were planned by the MDPAC Board of irectors, April 26. Appointed to the Board were Thomas C. Payne, MD, Lansing, and Charles H. Willison, MD, Midland, as directors at-large. Serving as new directors for congressional districts are Joshua S. Williams, D, Detroit, from the 1st congressional district; Aaron K. Warren, MD, Cassopolis, 4th district; Marshall J. Blondy, MD, Detroit, 17th district, and Robert D. Allaben, MD, Farmington, 19th district. The Board also considered ways to further increase membership.

AN AD HOC TASK FORCE to work with the AMA on educational projects re nationa health insurance will soon be appointed by the MSMS Council chairman. Author ization for the committee was voted by the MSMS Council 4/26.

AFTER REVIEWING a position statement from the Michigan Psychiatric Association, the MSMS Council 4/26 approved a statement that "any system of national health insurance should provide coverage for mental and emotional disorders to the same degree and extent as for any other illness."

A MSMS POSITION WAS approved by the MSMS Council 4/26 on who could dispense medications under certain circumstances, reading: "The State of Michigan Board of Pharmacy provisions be amended to allow registered nurses, on written policies and procedures adopted by the hospital pharmacy and/or therapeutics committee, to dispense medications ordered by a qualified physician in the absence of a registered pharmacist."

THE COUNCIL 4/26 authorized a letter to the Michigan Department of Health offering suggestions for consideration in their development of proposed "Guidelines for Development of Health Care Delivery Organizations." The Health Department has been ordered by legislation to develop such guidelines.

THE APPOINTMENT of an ad hoc membership committee by MSMS Council Chairman Brooker L. Masters, MD, was approved by the MSMS Council 4/26. Doctor Masters expressed his concerns for better membership recruitment activity in his message to the Spring meeting of the House of Delegates. The committee will be charged to develop guidelines and recommendations for the midsummer meeting of The Council.

MICHIGAN MEDICAL STUDENTS soon will begin receiving this MSMS Medigram newsletter twice each month, in another effort to tell students about the work of the state medical society. The MSMS House of Delegates in spring suggested such a project and The Council explored the financial aspects and voted approval.

A MAILING will be developed soon to all members offering them the opportunity of leasing automobiles through a MSMS-approved leasing company. This new membership service was approved by the MSMS Council 4/26 after examination of proposals from three leasing firms.

THE AMA COUNCIL on Medical Services has recommended the nomination of Donald N. Sweeny, MD, Detroit, to a seat on the Council, to succeed George W. Slagle, MD, Battle Creek, who is not eligible for another term. A letter supporting Doctor Sweeny, who is chairman of the MSMS delegation to the AMA, has been sent to the AMA by MSMS. The MSMS delegates met 4/26 to move along a campaign to support Doctor Sweeny at the AMA Convention in June in San Francisco.

THE NUMBER of registered physicians in Michigan totaled 9,090 doctors of medicine, 213 more than the previous year.

IF YOU HAVE NOT posted sign required under Phase II Economic Guidelines, you are urged to do so. Sign advising patients that a list of base prices for principal services is available for examination must be posted in a prominen place. "Principal services" that MDs must list in their schedule of base fees have finally been defined by Price Commission. It said principal services "are those which comprise 90% of the annual revenues." It is not necessary, however, to list any service for which the charge is $5 or less. Any change from the base fee must be noted in the fee schedule. In clinics, professional corporations and any other office with more than one physician, each doctor must post his own sign.

PLEASE RETURN your 1972 Physician Overhead Cost Survey. The information is vitally needed by the MSMS Bureau of Economic Information.

April 28, 1972 Vol. 71, No. 13

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EDITOR: HERBERT A. AUER

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Michigan Medicine

OFFICIAL JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY • VOLUME 71, NUMBER 14 • MAY, 1972

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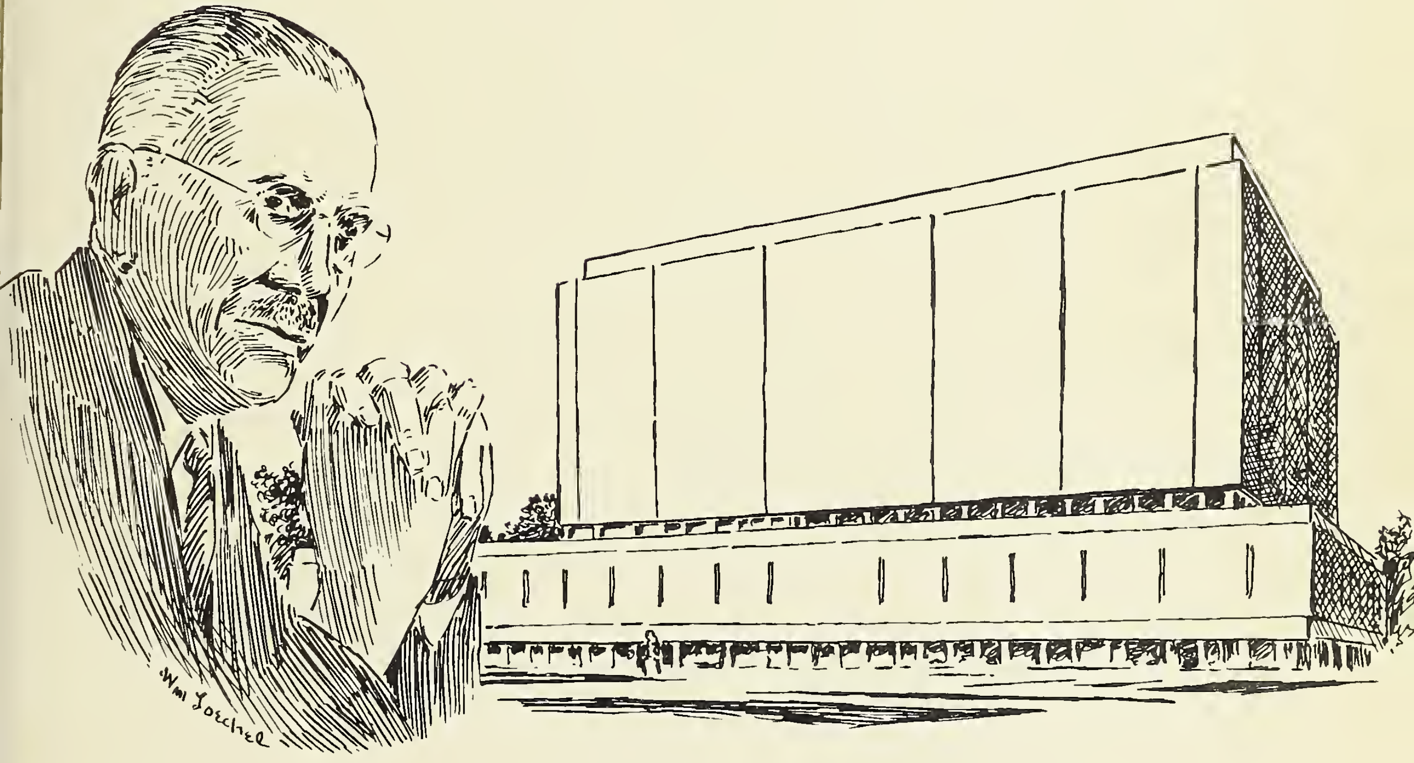
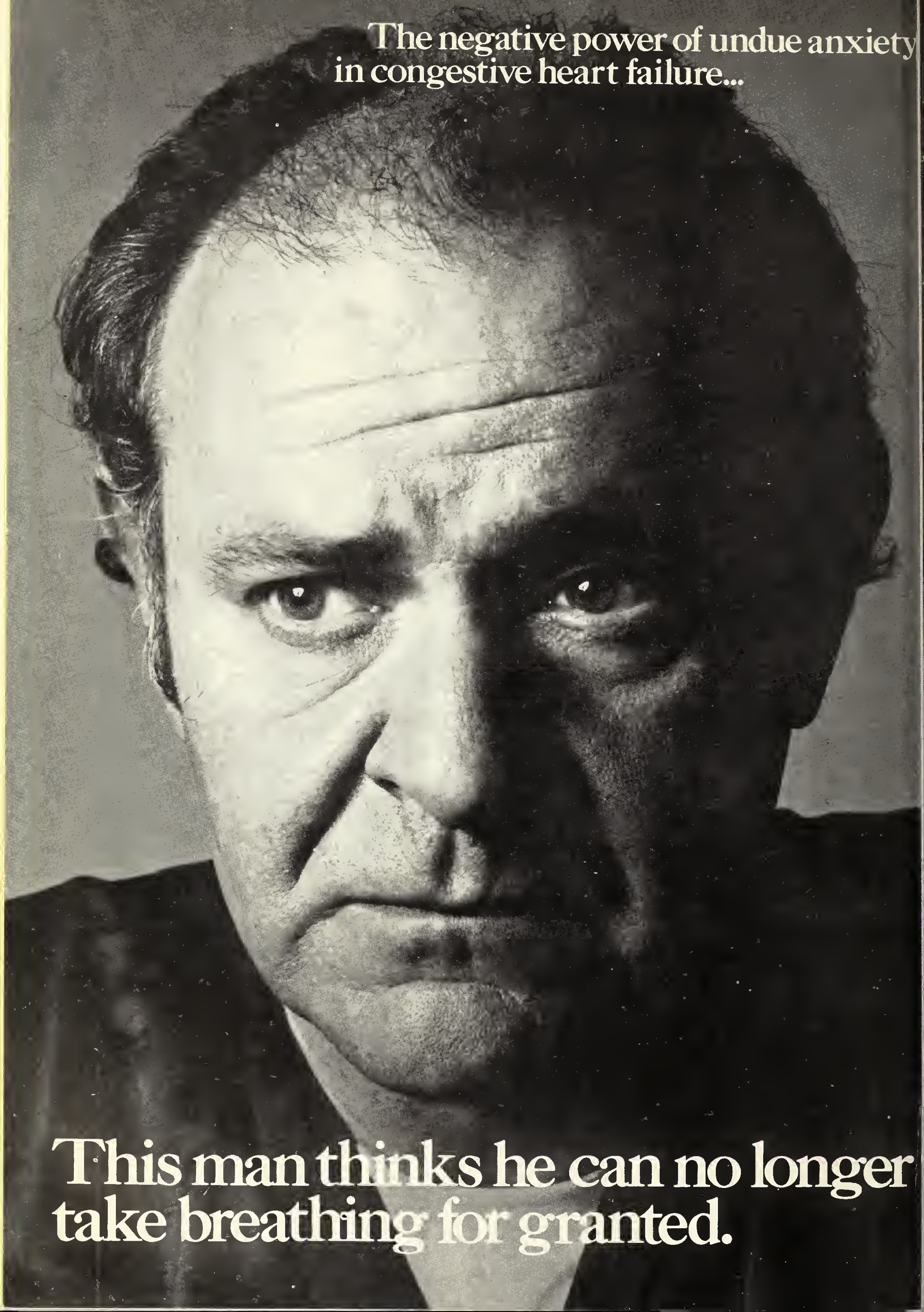


During this lovely month, our state, already studded with Michigan Week observances May 20-27, flashes another jewel: the new Wayne State University Gordon H. Scott Hall of Basic Medical Sciences, officially dedicated May 8.

The emphasis is on Michigan throughout this issue, with articles on physician placement opportunities, SW Michigan EKG telephone analysis, plans and hopes of the deans of Michigan's three medical schools, and an analysis of ZPG implications for Michigan.


The negative power of undue anxiety
in congestive heart failure...
This man thinks he can no longer
take breathing for granted.

Typical of many patients with congestive heart failure, he also suffers from severe anxiety, a psychic factor that may influence the character and degree of his symptoms, such as dyspnea. His apprehension may also deprive him of the emotional calm so important in maintenance therapy.

Aid in rehabilitation
Specific medical and environmental measures are often enhanced by the antianxiety action of adjunctive Libritabs (chlordiazepoxide). Libritabs can also facilitate treatment of the tense convalescent patient until antianxiety therapy is no longer required. Whereas in geriatrics the *usual daily dosage* is 5 mg two to four times daily, the *initial dosage* in elderly and debilitated patients should be limited to 10 mg or less per day, adjusting as needed and tolerated.

Concomitant use with primary agents
Libritabs is used concomitantly with certain specific medications of other classes of drugs, such as cardiac glycosides, diuretics, antihypertensives, vasodilators and oral anticoagulants, whenever excessive anxiety or emotional tension adversely affects the clinical condition or response to therapy. Although clinical studies have not established a cause and effect relationship, physicians should be aware that variable effects on blood coagulation have been reported very rarely in patients receiving oral anticoagulants and chlordiazepoxide HCl.

The positive power of
Libritabs®
(chlordiazepoxide)
5-mg, 10-mg, 25-mg tablets
t.i.d./q.i.d.
up to 100 mg daily
for severe anxiety accompanying congestive heart failure

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Indicated when anxiety, tension and apprehension are significant components of the clinical profile.

Contraindications: Patients with known hypersensitivity to the drug.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (*e.g.,* operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation, or in women of childbearing age requires that its potential benefits be weighed against its possible hazards.

Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (*e.g.,* excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

Supplied: Tablets containing 5 mg, 10 mg or 25 mg chlordiazepoxide.

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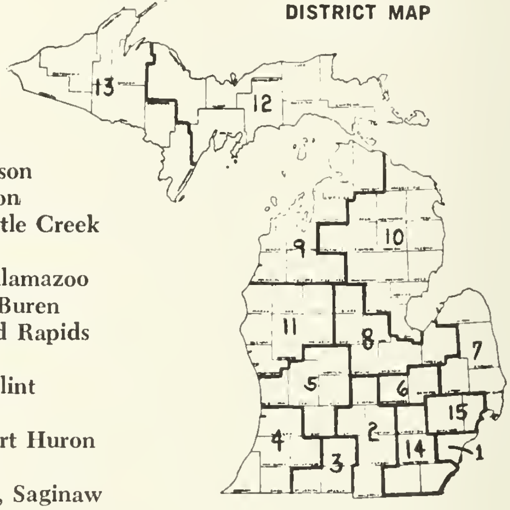
COUNCILOR DISTRICT MAP

First District Councilors: (Wayne County)
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Counties: Clinton, Eaton, Hillsdale, Ingham, Jackson
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Counties: Allegan, Berrien, Cass, Kalamazoo, Van Buren
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Counties: Barry, Ionia-Montcalm, Kent, Ottawa
Sixth District Councilor: Ernest P. Griffin, Jr., MD, Flint
Counties: Genesee, Shiawassee
Seventh District Councilor: James H. Tisdel, MD, Port Huron
Counties: Huron, Sanilac, Lapeer, St. Clair
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Counties: Gratiot-Isabella-Clare, Midland, Saginaw, Tuscola
Ninth District Councilor: Adam C. McClay, MD, Traverse City
Counties: Grand Traverse-Leelanau-Benzie, Manistee, Northern Michigan (Antrim, Charlevoix, Cheboygan and Emmet combined), Wexford-Missaukee
Tenth District Councilor: Robert C. Prophater, MD, Bay City
Counties: Alpena-Alcona-Presque Isle, Bay-Arenac-Iosco, North Central Counties, (Otsego, Montmorency, Crawford, Oscoda, Roscommon, Ogemaw, Gladwin and Kalkaska, combined)
Eleventh District Councilor: Brooker L. Masters, MD, Fremont
Counties: Mason, Mecosta-Osceola-Lake, Muskegon, Newaygo, Oceana
Twelfth District Councilor: Raymond Hockstad, MD, Escanaba
Counties: Chippewa-Mackinac, Delta-Schoolcraft, Luce, Marquette-Alger
Thirteenth District Councilor: Donald T. Anderson, MD, Wakefield
Counties: Dickinson-Iron, Gogebic, Houghton-Baraga-Keweenaw, Menominee, Ontonagon
Fourteenth District Councilor: Donato F. Sarapo, MD, Adrian
Counties: Lenawee, Livingston, Monroe, Washtenaw
Fifteenth District Councilor: Sydney Scher, MD, Mount Clemens
Counties: Macomb, Oakland

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President's page

Sidney Adler, MD
MSMS president

This is the year of the national presidential election. The candidates are using the professional lexicographer to expound their double meanings. The theme seems to be "let's talk awhile before we say anything." The issues and problems confronting our nation seem to be secondary.

Medicine apparently has many of the same difficulties of the politician. We talk about primary and secondary physicians, providers, peer review, PSROs (Professional Standards Review Organizations), HMOs (Health Maintenance Organizations), and foundations for medical care without really knowing the meaning of the catch phrases. But the issue still remains; namely, the distribution and delivery of health care to all segments of our population and the highest standard of care. The identification of costs must first concern itself with the needs.

We are just beginning to lay the keel of our state foundation as a separate corporation outside the state society. Physicians have various and sundry ideas of what constitutes the foundation. Perhaps a rather brief analysis of "foundation" nationwide, would help clarify our thoughts.

Because of variations among foundations, generalizations tend to be inaccurate.

Foundations for medical care are autonomous corporations, sponsored by local (state or county) medical societies, concerned with quality (high standards) and cost of medical care. Some are within county and state medical societies, others are separate corporations, some in conjunction with osteopaths.

Common to all foundations: — 1. Doctors must retain responsibility and leadership in the design, administration and delivery of medical services (in hospitals, office, clinic, home). 2. Medical care must be provided at a just and equitable cost to both patient and physician. 3. Peer review is conducted by medical society members to encourage high standards and control costs.

The primary function of most foundations is preserving traditional modes of rendering care: (solo, fee-for-service practice, patient-physician relationship and freedom of choice.) Over half the state medical societies do not have statewide foundations.

California Foundations: — In California, local county foundations started in the 1950s. In 12 years with Medicare and Medicaid and rising medical costs, county and state medical societies began to implement the foundation philosophy on a broad scale. Some of the increasing interest was to protect the solo practice of medicine.

In California, all foundations are on a county level. There is no California Medical Association foundation. In California, they advocate minimum benefits and will not contract with a carrier that does not underwrite them. Peer review is on a local level and is completed prior to reimbursement. It is controlled and conducted by physicians to assure quality of care and proper utilization of facilities.

Some of these foundations process the physicians' claims to all their commercial insurance carrier contracts. (See guidelines of the California Relative Value Study of the CMA with its own conversion factor. Committees determine criteria of care—length of stay, frequency of home and office visits, injections, labs, etc.)

Health Care Evaluation in Hennepin County Minnesota: — "The local medical profession assures availability of high quality health services to all residents of the area at reasonable cost." The twin cities, Minneapolis and St. Paul, participate in influencing health care planning, designing and monitoring services and evaluating the existing health care arrangements. This is an attempt to provide adequate health care to the needy. They do not insist on a minimum scope of benefits. They do not process claims and the guidelines are the usual and customary fees. They decide on the appropriateness and duration of stay in hospitals.

Missouri State Medical Society Model: It does not sponsor commercial prepaid health insurance programs. It does not set minimum benefits to the insurance carrier or set fee schedules. It is primarily a peer review mechanism for government programs. It attempts to identify patterns of health care delivery and areas of weakness in the practice of medicine.

Initially, participation by all physicians was on a quasi-mandatory basis. This led to many difficulties among physicians. The pattern of care by doctors of osteopathy and medical doctors conformed to the same standard of analysis. The final appeal is through Judicial Commission of the state.

Thus, it is obvious that there is growing concern that the solo fee-for-service type of medicine is being threatened. There is apprehension and fear of greater governmental involvement. Proof of this is the HR I (Bennett Amendment) before Congress, particularly in the PSRO which will probably involve consumer representation in the foundation. Foundations are thought to be the answer to the

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On Our Cover

Scott Hall is the new nucleus of the WSU School of Medicine. It is named for the late Gordon H. Scott, PhD, former chairman of the WSU Department of Anatomy, dean of the medical school and vice president for medical school development from 1961 to 1968. Scott Hall, in the Detroit Medical Center, is the largest college building in Michigan. Its size, coupled with faculty expansion, will allow the university medical school to become one of the largest in the U.S.

Publication of **Michigan Medicine** is under the direction of the Publication Committee, Michigan State Medical Society. The scientific editor is responsible for the scientific content. The managing editor is responsible for the production, correspondence and contents of the journal. He and the executive editor share final responsibility of the entire publication.

Neither the editors nor the state medical society will accept responsibility for statements made or opinions expressed by any contributor in any article or feature published in the pages of the journal. In editorials, the views expressed are those of the writer and not necessarily official positions of the society.

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1. Address scientific manuscripts to the Publication Committee, Michigan State Medical Society, 120 West Saginaw Street, East Lansing, Michigan 48823. Submit original, double-spaced typewritten copy and two carbon copies or photo copies on letter size (8½ x 11 inch) paper. On page one, include title, authors, degrees, academic titles, and any institutional or other credits.
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3. Illustrations should be submitted in the form of glossy prints or original sketches from which reproductions will be made by Michigan Medicine.
4. Articles should ordinarily be less than four printed pages in length (3000 words).
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6. The editors welcome, and will consider for publication, letters containing information of interest to Michigan physicians, or presenting constructive comment on current controversial issues. News items and notes are welcome.
7. It is understood that material is submitted for exclusive publication in Michigan Medicine.

MICHIGAN MEDICINE is the official organ of the Michigan State Medical Society, published under the direction of the Publication Committee. Published Semi-Monthly, Trimonthly in January and December; 26 issues, by the Michigan State Medical Society as its official journal. Second class postage paid at East Lansing, Mich. and at additional mailing offices. Yearly subscription rate, $9.00; single copies, 80 cents. Additional postage: Canada, $1.00 per year; Pan-American Union, $2.50 per year; Foreign, $2.50 per year. Printed in USA. All communications relative to manuscripts, advertising, news, exchanges, etc., should be addressed to Judith Marr, Michigan State Medical Society, 120 West Saginaw Street, East Lansing, Michigan 48823. Phone Area Code 517, 337-1351.

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rheumatoid arthritic blowup...

Tandearil® Geigy
oxyphenbutazone NF

tablets of 100 mg.

Important Note: This drug is not a simple analgesic. Do not administer casually. Carefully evaluate patients before starting treatment and keep them under close supervision. Obtain a detailed history, and complete physical and laboratory examination (complete hemogram, urinalysis, etc.) before prescribing and at frequent intervals thereafter. Carefully select patients, avoiding those responsive to routine measures, contraindicated patients or those who cannot be observed frequently. Warn patients not to exceed recommended dosage. Short-term relief of severe symptoms with the smallest possible dosage is the goal of therapy. Dosage should be taken with meals or a full glass of milk. Patients should discontinue the drug and report immediately any sign of: fever, sore throat, oral lesions (symptoms of blood dyscrasia); dyspepsia, epigastric pain, symptoms of anemia, black or tarry stools or other evidence of intestinal ulceration or hemorrhage, skin reactions, significant weight gain or edema. A one-week trial period is adequate. Discontinue in the absence of a favorable response. Restrict treatment periods to one week in patients over sixty.
Indications: Acute gouty arthritis, rheumatoid arthritis, rheumatoid spondylitis.
Contraindications: Children 14 years or less; senile patients; history or symptoms of G.I. inflammation or ulceration including severe, recurrent or persistent dyspepsia; history or presence of drug allergy; blood dyscrasias; renal, hepatic or cardiac dysfunction; hypertension; thyroid disease; systemic edema; stomatitis and salivary gland enlargement due to the drug; polymyalgia rheumatica and temporal arteritis; patients receiving other potent chemotherapeutic agents, or long-term anticoagulant therapy.
Warnings: Age, weight, dosage, duration of therapy, existence of concomitant diseases, and concurrent potent chemotherapy affect incidence of toxic reactions. Carefully instruct and observe the individual patient, especially the aging (forty years and over) who have increased susceptibility to the toxicity of the drug. Use lowest effective dosage. Weigh initially unpredictable benefits against potential risk of severe, even fatal, reactions. The disease condition itself is unaltered by the drug. Use with caution in first trimester of pregnancy and in nursing mothers. Drug may appear in cord blood and breast milk. Serious, even fatal, blood dyscrasias, including aplastic anemia, may occur suddenly despite regular hemograms, and may become manifest days or weeks after cessation of drug. Any significant change in total white count, relative decrease in granulocytes, appearance of immature forms, or fall in hematocrit should signal immediate cessation of therapy and complete hematologic investigation. Unexplained bleeding involving CNS, adrenals, and G.I. tract has occurred. The drug may potentiate action of insulin, sulfonylurea, and sulfonamide-type agents. Carefully observe patients taking these agents. Nontoxic and toxic goiters and myxedema have been reported (the drug reduces iodine uptake by the thyroid). Blurred vision can be a significant toxic symptom worthy of a complete ophthalmological examination. Swelling of ankles or face in patients under sixty may be prevented by reducing dosage. If edema occurs in patients over sixty, discontinue drug.
Precautions: The following should be accomplished at regular intervals: Careful detailed history for disease being treated and detection of earliest signs of adverse reactions; complete physical examination including check of patient's weight; complete weekly (especially for the aging) or an every two week blood check; pertinent laboratory studies. Caution patients about participating in activity requiring alertness and coordination, as driving a car, etc. Cases of leukemia have been reported in patients with a history of short- and long-term therapy. The majority of these patients were over forty. Remember that arthritic-type pains can be the presenting symptom of leukemia.
Adverse Reactions: This is a potent drug; its misuse can lead to serious results. Review detailed information before beginning therapy. Ulcerative esophagitis, acute and reactivated gastric and duodenal ulcer with perforation and hemorrhage, ulceration and perforation of large bowel, occult G.I. bleeding with anemia, gastritis, epigastric pain, hematemesis, dyspepsia, nausea, vomiting and diarrhea, abdominal distention, agranulocytosis, aplastic anemia, hemolytic anemia, anemia due to blood loss including occult G.I. bleeding, thrombocytopenia, pancytopenia, leukemia, leukopenia, bone marrow depression, sodium and chloride retention, water retention and edema, plasma dilution, respiratory alkalosis, metabolic acidosis, fatal and nonfatal hepatitis (cholestasis may or may not be prominent), petechiae, purpura without thrombocytopenia, toxic pruritus, erythema nodosum, erythema multiforme, Stevens-Johnson syndrome, Lyell's syndrome (toxic necrotizing epidermolysis), exfoliative dermatitis, serum sickness, hypersensitivity angiitis (polyarteritis), anaphylactic shock, urticaria, arthralgia, fever, rashes (all allergic reactions require prompt and permanent withdrawal of the drug), proteinuria, hematuria, oliguria, anuria, renal failure with azotemia, glomerulonephritis, acute tubular necrosis, nephrotic syndrome, bilateral renal cortical necrosis, renal stones, ureteral obstruction with uric acid crystals due to uricosuric action of drug, impaired renal function, cardiac decompensation, hypertension, pericarditis, diffuse interstitial myocarditis with muscle necrosis, perivascular granulomata, aggravation of temporal arteritis in patients with polymyalgia rheumatica, optic neuritis, blurred vision, retinal hemorrhage, toxic amblyopia, retinal detachment, hearing loss, hyperglycemia, thyroid hyperplasia, toxic goiter association of hyperthyroidism and hypothyroidism (causal relationship not established), agitation, confusional states, lethargy; CNS reactions associated with overdosage, including convulsions, euphoria, psychosis, depression, headaches, hallucinations, giddiness, vertigo, coma, hyperventilation, insomnia; ulcerative stomatitis, salivary gland enlargement.
(B)98-146-800-E

For complete details, including dosage, please see full prescribing information.

GEIGY Pharmaceuticals
Division of CIBA-GEIGY Corporation
Ardsley, New York 10502

TA-8356-9

a new outlook in chronic pain

of moderate to severe intensity

Though Talwin® can be compared to codeine in analgesic efficacy, it is not a narcotic. So patients receiving Talwin for prolonged periods face fewer of the consequences you've come to expect with narcotic analgesics. And that, in the long run, can mean a better outlook for your chronic-pain patient.

Talwin Tablets are:

- **Comparable to codeine in analgesic efficacy:** one 50 mg. Talwin Tablet appears equivalent in analgesic effect to 60 mg. (1 gr.) of codeine. Onset of significant analgesia usually occurs within 15 to 30 minutes. Analgesia is usually maintained for 3 hours or longer.
- **Tolerance not a problem:** tolerance to the analgesic effect of Talwin Tablets has not been reported, and no significant changes in clinical laboratory parameters attributable to the drug have been reported.
- **Dependence rarely a problem:** during three years of wide clinical use, only a few cases of dependence have been reported. In prescribing Talwin for chronic use, the physician should take precautions to avoid increases in dose by the patient and to prevent the use of the drug in anticipation of pain rather than for the relief of pain.
- **Not subject to narcotic controls:** convenient to prescribe—day or night—even by phone.
- **Generally well tolerated by most patients:** infrequently cause decrease in blood pressure or tachycardia; rarely cause respiratory depression or urinary retention; seldom cause diarrhea or constipation. If dizziness, lightheadedness, nausea or vomiting are encountered, these effects tend to be self-limiting and to decrease after the first few doses. (See last page of this advertisement for a complete discussion of adverse reactions and a brief discussion of other Prescribing Information.)

50 mg. Tablets

Talwin®

brand of **pentazocine** (as hydrochloride)

the long-range analgesic

a new outlook in chronic pain

of moderate to severe intensity

Contraindications: Talwin, brand of pentazocine (as hydrochloride), should not be administered to patients who are hypersensitive to it.

Warnings: *Head Injury and Increased Intracranial Pressure.* The respiratory depressant effects of Talwin and its potential for elevating cerebrospinal fluid pressure may be markedly exaggerated in the presence of head injury, other intracranial lesions, or a preexisting increase in intracranial pressure. Furthermore, Talwin can produce effects which may obscure the clinical course of patients with head injuries. In such patients, Talwin must be used with extreme caution and only if its use is deemed essential.

Usage in Pregnancy. Safe use of Talwin during pregnancy (other than labor) has not been established. Animal reproduction studies have not demonstrated teratogenic or embryotoxic effects. However, Talwin should be administered to pregnant patients (other than labor) only when, in the judgment of the physician, the potential benefits outweigh the possible hazards. Patients receiving Talwin during labor have experienced no adverse effects other than those that occur with commonly used analgesics. Talwin should be used with caution in women delivering premature infants.

Drug Dependence. There have been instances of psychological and physical dependence on parenteral Talwin in patients with a history of drug abuse and, rarely, in patients without such a history. Abrupt discontinuance following the extended use of parenteral Talwin has resulted in withdrawal symptoms. There have been a few reports of dependence and of withdrawal symptoms with orally administered Talwin. Patients with a history of drug dependence should be under close supervision while receiving Talwin orally.

In prescribing Talwin for chronic use, the physician should take precautions to avoid increases in dose by the patient and to prevent the use of the drug in anticipation of pain rather than for the relief of pain.

Acute CNS Manifestations. Patients receiving therapeutic doses of Talwin have experienced, in rare instances, hallucinations (usually visual), disorientation, and confusion which have cleared spontaneously within a period of hours. The mechanism of this reaction is not known. Such patients should be very closely observed and vital signs checked. If the drug is reinstituted it should be done with caution since the acute CNS manifestations may recur.

Usage in Children. Because clinical experience in children under 12 years of age is limited, administration of Talwin in this age group is not recommended.

Ambulatory Patients. Since sedation, dizziness, and occasional euphoria have been noted, ambulatory patients should be warned not to operate machinery, drive cars, or unnecessarily expose themselves to hazards.

Precautions: *Certain Respiratory Conditions.* Although respiratory depression has rarely been reported after oral administration of Talwin, the drug should be administered with caution to patients with respiratory depression from any cause, severe bronchial asthma and other obstructive respiratory conditions, or cyanosis.

Impaired Renal or Hepatic Function. Decreased metabolism of the drug by the liver in extensive liver disease may predispose to accentuation of side effects. Although laboratory tests have not indicated that Talwin causes or increases renal or hepatic impairment, the drug should be administered with caution to patients with such impairment.

Myocardial Infarction. As with all drugs, Talwin should be used with caution in patients with myocardial infarction who have nausea or vomiting.

Biliary Surgery. Until further experience is gained with the effects of Talwin on the sphincter of Oddi, the drug should be used with caution in patients about to undergo surgery of the biliary tract.

Patients Receiving Narcotics. Talwin is a mild narcotic antagonist. Some patients previously receiving narcotics have experienced mild withdrawal symptoms after receiving Talwin.

CNS Effect. Caution should be used when Talwin is administered to patients prone to seizures; seizures have occurred in a few such patients in association with the use of Talwin although no cause and effect relationship has been established.

Adverse Reactions: Reactions reported after oral administration of Talwin include *gastrointestinal:* nausea, vomiting; infrequently constipation; and rarely abdominal distress, anorexia, diarrhea. *CNS effects:* dizziness, lightheadedness, sedation, euphoria, headache; infrequently weakness, disturbed dreams, insomnia, syncope, visual blurring and focusing difficulty, hallucinations (see *Acute CNS Manifestations* under WARNINGS); and rarely tremor, irritability, excitement, tinnitus. *Autonomic:* sweating; infrequently flushing; and rarely chills. *Allergic:* infrequently rash; and rarely urticaria, edema of the face. *Cardiovascular:* infrequently decrease in blood pressure, tachycardia. *Other:* rarely respiratory depression, urinary retention.

Dosage and Administration: *Adults.* The usual initial adult dose is 1 tablet (50 mg.) every three or four hours. This may be increased to 2 tablets (100 mg.) when needed. Total daily dosage should not exceed 600 mg.

When antiinflammatory or antipyretic effects are desired in addition to analgesia, aspirin can be administered concomitantly with Talwin.

Children Under 12 Years of Age. Since clinical experience in children under 12 years of age is limited, administration of Talwin in this age group is not recommended.

Duration of Therapy. Patients with chronic pain who have received Talwin orally for prolonged periods have not experienced withdrawal symptoms even when administration was abruptly discontinued (see WARNINGS). No tolerance to the analgesic effect has been observed. Laboratory tests of blood and urine and of liver and kidney function have revealed no significant abnormalities after prolonged administration of Talwin.

Overdosage: *Manifestations.* Clinical experience with Talwin overdosage has been insufficient to define the signs of this condition.

Treatment. Oxygen, intravenous fluids, vasopressors, and other supportive measures should be employed as indicated. Assisted or controlled ventilation should also be considered. Although nalorphine and levallorphan are *not* effective antidotes for respiratory depression due to overdosage or unusual sensitivity to Talwin, parenteral naloxone (Narcan®, available through Endo Laboratories) is a specific and effective antagonist. If naloxone is not available, parenteral administration of the analeptic, methylphenidate (Ritalin®), may be of value if respiratory depression occurs.

Talwin is not subject to narcotic controls.

How Supplied: Tablets, peach color, scored. Each tablet contains Talwin (brand of pentazocine) as hydrochloride equivalent to 50 mg. base. Bottles of 100.

Winthrop Winthrop Laboratories, New York, N. Y. 10016 (1583)

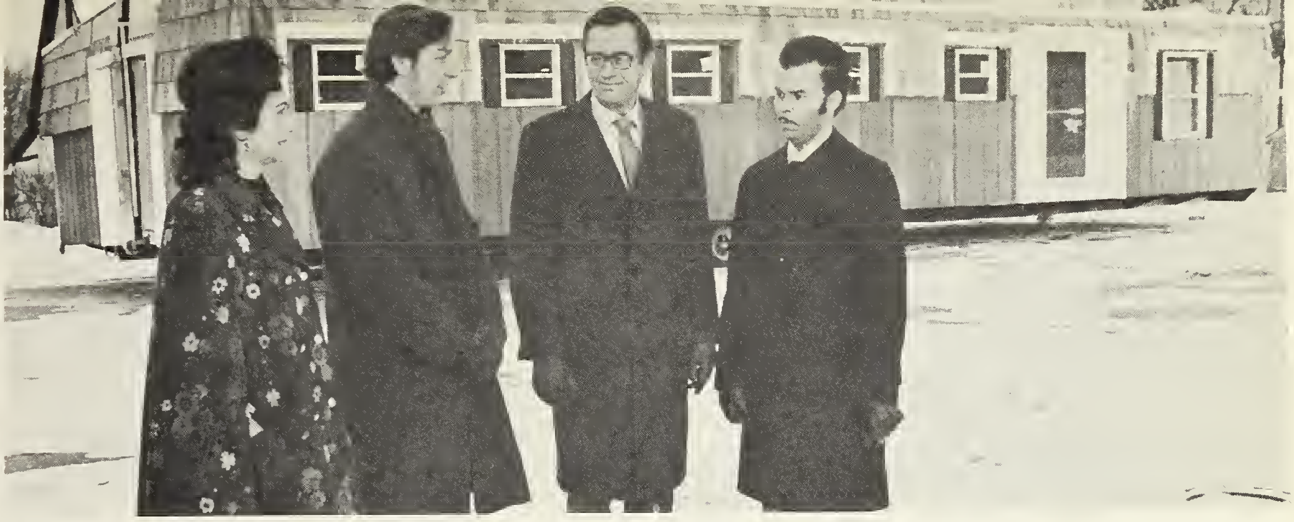
50 mg. Tablets

Talwin®

brand of

pentazocine (as hydrochloride)

the long-range analgesic



Leading persons in the establishment of the new Kalamazoo Family Health Center, Inc., are, from left, Betty Offet, president, board of directors; John Vogt, administrator; Robert Cain, architect, and Lenard Fouche, MD, medical director. The specially-designed center is shown in the back prior to installation.

County in the spotlight

Kalamazoo doctors' enthused support Keys neighborhood health center

By Judith Marr
Managing Editor

On the north side of Kalamazoo, described by health leaders as "a pocket of poverty, physical deterioration and medical resource scarcity," there is a shining example of community cooperation.

The shining example is the Kalamazoo Family Health Center, Inc., which, on March 8, began to provide medical services from a mobile unit specifically designed as a temporary health facility. It serves the medically indigent in the county and any resident of north Kalamazoo.

The mobile unit is the first result of dreams and plans of the community's medical leaders, among them the Kalamazoo Academy of Medicine. The academy's cooperation in the unit's creation is a fine example of the leadership that a county medical society can provide to its community.

The mobile unit is designed to meet the needs of those Kalamazoo area residents who "have just given up medically—who have no doctor," says Frederick J. Margolis, MD, acting county health director and a member of the health center's board of directors.

The unit will fill in until a permanent Family Health Center is completed. Construction should begin in the fall, estimates Doctor Margolis, who is greatly enthused about the entire project.

"We are trying to duplicate the service of private practices as much as possible. The patients are followed by their own doctors; if they are sick they are sent right to a hospital, and referred to specialists if necessary," he says.

New patients entering the mobile unit are met by trained personnel who sit with them and explain the project, according to Doctor Margolis.

There are now six full-time employes of the health center's mobile unit—among them an LPN, a nurse's aide, clerical personnel and full-time Administrator John Vogt. Medical Administrator Lenard Fouche, MD, a board-certified surgeon, just joined the staff on a part-time basis after four years residency at St. Louis Hospital.

The mobile unit itself looks more like a house, says Doctor Margolis. It contains an offce, large waiting room divided into two sections for adults and children, three examination rooms and an X-ray room. It was designed by an architect and built to the health center corporation's specifications.

And much of the credit for its being belongs to the Kalamazoo Academy of Medicine. "The guys have been great about it," says Doctor Margolis.

In March 1971, the Academy passed a resolution "enthusiastically supporting the establishment of a family health center on the north side of Kalamazoo."

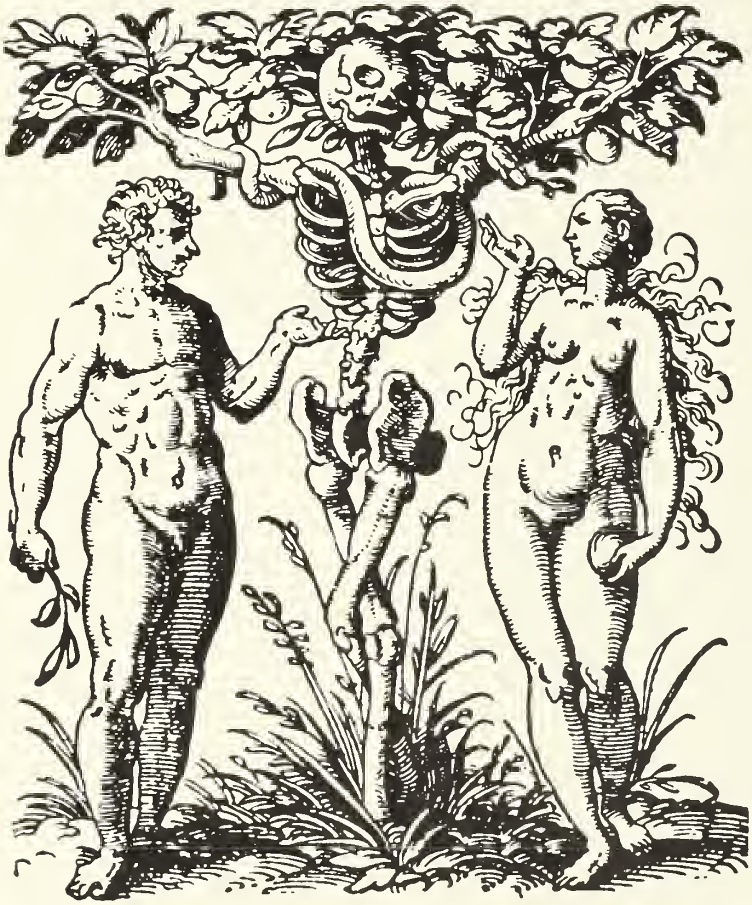
The resolution followed a study made by the Academy's Ad Hoc Committee on Community Health Care which declared that the prime health need of Kalamazoo was to provide preventive health care and high quality medical treatment services for all economic levels in the community.

The Ad Hoc Committee's findings agreed with an earlier report made by the Community Services Council of Kalamazoo County, which classified

(Continued on Page 420)

In acute gonorrhea

(urethritis, cervicitis, proctitis when due to susceptible strains of N. gonorrhoeae)



Sterile Trobicin®
(spectinomycin dihydrochloride pentahydrate)—For Intramuscular injections, 2 gm vials containing 5 ml when reconstituted with diluent. 4 gm vials containing 10 ml when reconstituted with diluent.

An aminocyclitol antibiotic active *in vitro* against most strains of *Neisseria gonorrhoeae* (MIC 7.5 to 20 mcg/ml). Definitive *in vitro* studies have shown no cross resistance of *N. gonorrhoeae* between Trobicin and penicillin.

Indications: Acute gonorrheal urethritis and proctitis in the male and acute gonorrheal cervicitis and proctitis in the female when due to susceptible strains of *N. gonorrhoeae*.

Contraindications: Contraindicated in patients previously found hypersensitive to Trobicin. Not indicated for the treatment of syphilis.

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Warnings: Antibiotics used to treat gonorrhea may mask or delay the symptoms of incubating syphilis. Patients should be carefully examined and monthly serological follow-up for at least 3 months should be instituted if the diagnosis of syphilis is suspected.

Safety for use in infants, children and pregnant women has not been established.

Precautions: The usual precautions should be observed with atopic individuals. Clinical effectiveness should be monitored to detect evidence of development of resistance of *N. gonorrhoeae*.

Adverse reactions: The following reactions were observed during the single-dose clinical trials: soreness at the injection site, urticaria, dizziness, nausea, chills, fever and insomnia.

During multiple-dose subchronic tolerance studies in normal human volunteers, the following were noted: a decrease in hemo-

Trobicin®

sterile spectinomycin dihydrochloride pentahydrate, Upjohn

single-dose intramuscular treatment

High cure rate:* 96% of 571 males, 95% of 294 females
(Dosages, sites of infection, and criteria for diagnosis and cure are defined below.)**

Assurance of a single-dose, physician-controlled treatment schedule

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No allergic reactions occurred in patients with an alleged history of penicillin sensitivity when treated with Trobicin, although penicillin antibody studies were not performed

---

Active against most strains of Neisseria gonorrhoeae in vitro (M.I.C. 7.5-20 mcg/ml)

A single two-gram injection produces peak serum concentrations averaging about 100 mcg/ml in one hour (average serum concentrations of 15 mcg/ml present 8 hours after dosing)

Note: Antibiotics used in high doses for short periods of time to treat gonorrhea may mask or delay the symptoms of incubating syphilis. Since the treatment of syphilis demands prolonged therapy with any effective antibiotic, and since Trobicin is not indicated in the treatment of syphilis, patients being treated for gonorrhea should be closely observed clinically. Monthly serological follow-up for at least 3 months should be instituted if the diagnosis of syphilis is suspected. Trobicin is contraindicated in patients previously found hypersensitive to it.

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*Data compiled from reports of 14 investigators. **Diagnosis was confirmed by cultural identification of *N. gonorrhaeae* on Thayer-Martin media in all patients. Criteria for cure: negative culture after at least 2 days post-treatment in males and at least 7 days post-treatment in females. Any positive culture obtained post-treatment was considered evidence of treatment failure even though the follow-up period might have been less than the periods cited above under "criteria for cure" except when the investigator determined that reinfection through additional sexual contacts was likely. Such cases were judged to be reinfections rather than relapses or failures. These cases were regarded as non-evaluatable and were not included. JA72 1848-6

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globin, hematocrit and creatinine clearance; elevation of alkaline phosphatase, BUN and SGPT. In single and multiple-dose studies in normal volunteers, a reduction in urine output was noted. Extensive renal function studies demonstrated no consistent changes indicative of renal toxicity.

Dosage and administration: Keep at 25°C and use within 24 hours after reconstitution with diluent.
Male—single 2 gram dose (5 ml) intramuscularly. Patients with gonorrheal proctitis and patients being re-treated after failure of previous antibiotic therapy should receive 4 grams (10 ml). In geographic areas where antibiotic resistance is known to be prevalent, initial treatment with 4 grams (10 ml) intramuscularly is preferred.
Female—single 4 gram dose (10 ml) intramuscularly.

How supplied: *Vials, 2 and 4 grams—with ampoule of Bacteriostatic Water for Injection with Benzyl Alcohol* 0.9% *w/v*. Reconstitution yields 5 and 10 ml respectively with a concentration of spectinomycin dihydrochloride pentahydrate equivalent to 400 mg spectinomycin per ml. For intramuscular use only.
Susceptibility Powder—for testing *in vitro* susceptibility of *N. gonorrhoeae*.

Human pharmacology: Rapidly absorbed after intramuscular injection. A two-gram injection produces peak serum concentrations averaging about 100 mcg/ml at one hour with 15 mcg/ml at 8 hours. A four-gram injection produces peak serum concentrations averaging 160 mcg/ml at two hours with 31 mcg/ml at 8 hours.
For additional product information, see your Upjohn representative or consult the package insert. MED-B-1-S (LWB)

Upjohn The Upjohn Company, Kalamazoo, Michigan 49001

medical care second in importance to the community and third in priority for community attention.

The Academy devoted an entire meeting to the proposed neighborhood center and heard Albert L. Pisani, MD, director, describe his highly successful health care center in the Chicago inner city.

The Academy was vitally involved in the planning of the center, and early appointed two members, Tom Riegle, MD, and Donald May, MD, now Academy president, to its board.

The Academy donated $1,500 to help get the center started, while virtually every other major health organization in the community, including Kalamazoo's two general hospitals and the Kalamazoo County Health Department, formally endorsed the center.

Now there are 30 Kalamazoo physicians verbally committed to support of the center, and nine of them work on the staff on an hourly basis. A full-time pediatrician, a woman doctor, is expected to join the staff this month, after completing Michigan licensing requirements.

The Academy representative is now David K. Hickok, MD, who is one of seven professionals on the 21-member board.

The center has a sliding fee schedule, charging its patients according to size of family and ability to pay. Thus the center is self-supporting. And "we believe the staff doctors should be paid," says Doctor Margolis.

When the staff moves into its $1 million permanent building, says Doctor Margolis, "we will devote half our energies to preventative medicine."

Through an Upjohn grant, the center will be hiring health education and Outreach personnel to go out into the neighborhood and into the homes.

"Oh, we'll have the kind of setup you wish you had in your own office," predicts Doctor Margolis. The clinic will offer family planning, nutrition information, venereal disease advice and team counseling for emotionally troubled youth. Psychiatric workers from Kalamazoo State Hospital and Kalamazoo Child Guidance Clinic will work through the clinic and a large room will be available for neighborhood meetings.

Most recently, the Family Health Center, Inc., has become one of three Michigan organizations to request Michigan State Medical Society endorsement of its application for placement of two physicians from the National Health Service Corps.

"We feel that we should get new medical personnel in the community rather than dilute the present physician force," explains Doctor Margolis.

On March 28, MSMS endorsed the center's request for the health service corps physicians, and approval from the federal government is awaited.

"Things are going nicely," Doctor Margolis reports. "This is the kind of thing that is going to build. It's been well planned and thought out. And people are keeping their appointments."

UPMS sets annual meeting June 23 - 24 in Marquette

Plans are taking shape for the 77th Annual Meeting of the Upper Peninsula Medical Society, scheduled June 23-24 at the Holiday Inn in Marquette.

Morning sessions both days will present panel discussions of the problems of family practitioners in small-town office practices. Chairman is Eric T. Lincke, MD, Marquette; whose committee is composed of William Hopkins, MD, R. L. Carefoot, MD, and Carl F. Hammerstrom, MD, all of Marquette.

Louis Rosenbaum, MD, Ishpeming, is chairman of the Friday afternoon session which will take up socio-economic problems as related to third party systems. On the panel will be Robert L. Hamburg, MD, president of the board, Michigan Medical Service; Richard Campau, manager, MSMS Department of Operations and Economics; Donald T. Anderson, MD, Kingsford, and Raymond L. Hockstad, MD, Escanaba, MSMS Councilors, and Larry Sell, MD, Manistique.

DOCTOR ADLER/Continued

complex requirement under the Bennett Amendment which has not as yet passed Congress.

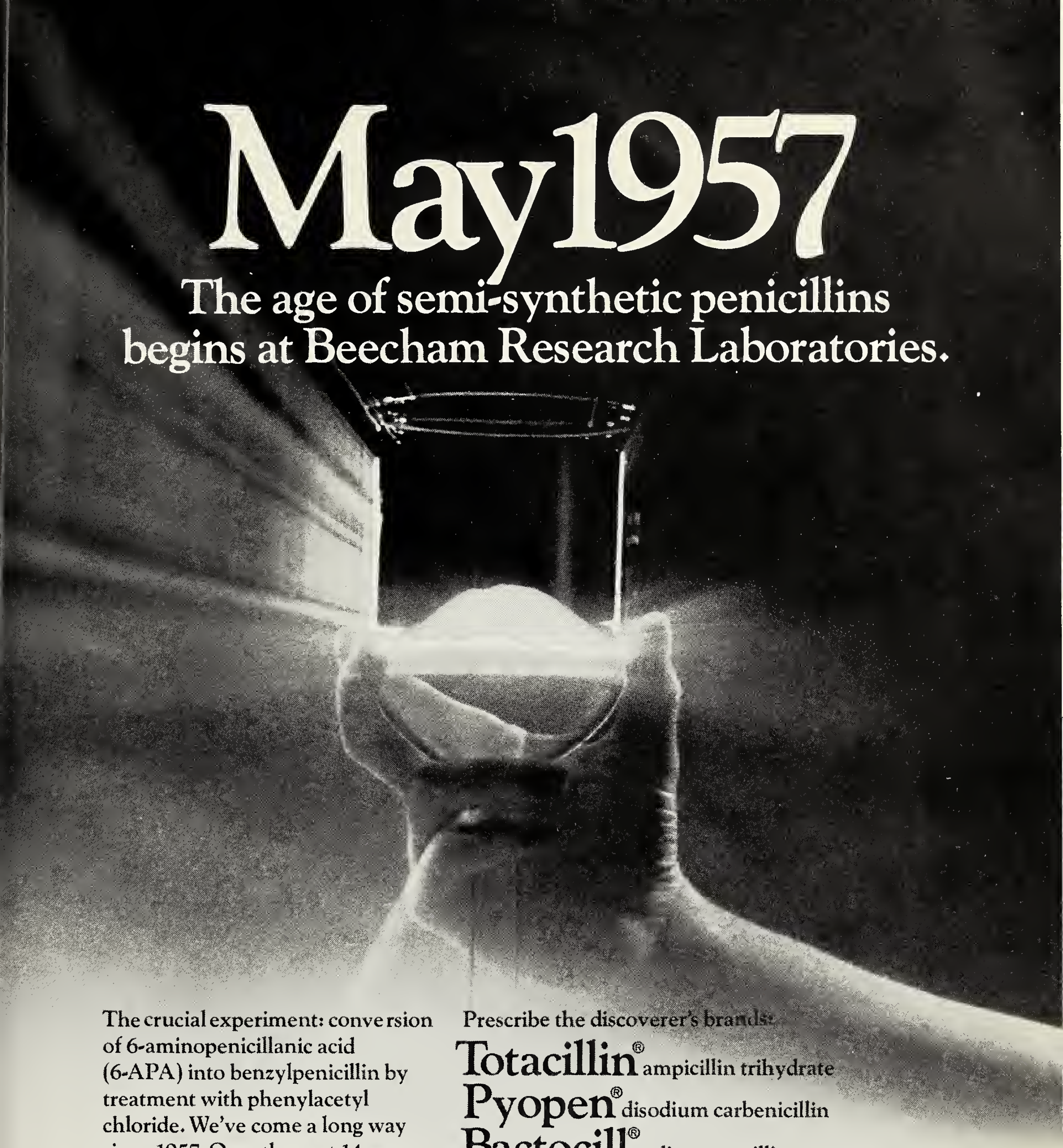
The social planners and congressional leaders and those who advise them tend to overlook the fact that medicine is not an exact science as yet and that there are personal human factors that influence physicians and patients. Is medicine a commodity that can be bought and sold like any other commodity on the open market?

The teaching of the physician and the public as to the problems involved are essential to the success of any foundation. Government supervision and control may, in the long run, be self-defeating.

We must have a pluralistic approach to any type of delivery and distribution of health care. Carefully controlled experimentation in the delivery and distribution of health care is essential for meaningful changes if we are to identify the rising costs.

Let us all clearly understand what we are talking about and doing in altering the practice of medicine.

There is danger in the verbal pollution of the medical atmosphere by government and medical politicians. If we are not crystal clear in our aims and goals in our practice of medicine, we will wind up shoveling fog.



May 1957

The age of semi-synthetic penicillins begins at Beecham Research Laboratories.

The crucial experiment: conversion of 6-aminopenicillanic acid (6-APA) into benzylpenicillin by treatment with phenylacetyl chloride. We've come a long way since 1957. Over the past 14 years more than 3000 different semi-synthetic penicillins have been synthesized and evaluated by our staff. The fruits of their work are in your hands today.

Need we say more?

Prescribe the discoverer's brands:

Totacillin® ampicillin trihydrate
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and more to come

Beecham-Massengill Pharmaceuticals BMP
Div. of Beecham Inc., Bristol, Tennessee 37620

☐Totacillin (ampicillin trihydrate) capsules equivalent to 250 mg. and 500 mg. ampicillin, for oral suspension equivalent to 125 mg./5 cc. and 250 mg./5 cc. ampicillin. ☐Pyopen (disodium carbenicillin) vials for injection equivalent to 1 gm. and 5 gm. of carbenicillin. ☐Bactocill (sodium oxacillin) capsules equivalent to 250 mg. and 500 mg. oxacillin and vials for injection equivalent to 500 mg. and 1 gm. oxacillin.

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per sq. cm.
CAUTION—Federal (U.S.A.) law prohibits dispensing without prescription.
PHARMACISTS—Package contains two circulars. Only 'Directions for Use' circular is intended for the patient.
24 in. x 3 in.
(60 cm. x 7.5 cm.)

Additional information available to the profession on request.

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Scientific papers

THE MICHIGAN BLUE CROSS Hemodialysis Pilot Project

Results of a 30 month pilot study

By William G. Bunto, MD
Harold L. Tremain, MD, ACOG
Neel M. Kibe, MA, MBA
Detroit

The development of the teflon-silastic cannula in 1960 by Quinton, Dillard and Scribner[1] made repetitive hemodialysis for chronic renal failure feasible for large numbers of patients. Before, hemodialysis had been used primarily for short-term treatment of reversible kidney disease, acute poisonings, and the like. Repetitive hemodialysis has now become an accepted clinical procedure, no longer considered research or experimental therapy. Approximately 5,000 patients in the United States are receiving hemodialysis today, either at home or in centers especially equipped and staffed for this purpose.[2] Yet there are probably twice this many persons in the United States who could benefit from treatment, but are not receiving it mainly because of lack of facilities, and the extremely high costs involved.

Having already recognized short-term inpatient hemodialysis as a hospital benefit, Michigan Blue Cross in 1963 allowed payment for the same procedure on a repetitive basis for chronic renal disease. In the four years extending from 1963 to 1967, payments totalling $570,000 were made on behalf of 57 Michigan Blue Cross members in 12 different hospitals, averaging $12,000 per patient year, or $33 per patient day.

Home hemodialysis was seen as a partial answer to the prohibitive costs of the procedure as early as 1964.[3] By 1968, it was clear home hemodialysis had developed into an accepted, feasible practice for selected patients, at an annual cost (disregarding initial equipment costs) far below that of hospital center dialysis.[4] With this background, then, Michigan Blue Cross embarked on a pilot project whose intent was to cover the major costs of the procedure both in the hospital outpatient department and at home. For the former, this project represented an extension of existing outpatient benefits; for the latter, an extension of the existing Michigan Blue Cross Coordinated Home Care Program.

There were several objectives of the pilot study: 1) to develop statistical data pertaining to cost and utilization, for informational and actuarial uses, 2) to encourage the coordinated, planned development of hemodialysis programs in the State, and similarly to discourage unnecessary duplication of facilities, 3) to provide financial support for the relatively small numbers of patients in whom chronic renal disease is economically catastrophic, and 4) to discover and correct administrative problems before proposing hemodialysis as a Michigan Blue Cross contract benefit.

Covered Services and Supplies

The pilot project began September 1, 1968, and ended March 31, 1971. During this time, Michigan Blue Cross covered the costs of the following for hemodialysis outpatients: disposable supplies, such as the dialysis membrane, tubing, dressings, dialysis solution, drugs, and related laboratory tests. Other expenses, such as nursing supervision, use of the equipment and facilities, and instruction were generally included as a "room charge" and reimbursed as such. Special procedures, such as blood transfusion, minor surgery (e.g., catheter insertion) were not included as a pilot project expense, since these are generally paid as a contractual outpatient benefit. The cost of blood itself was excluded as a pilot project benefit, as well as by contract.

For home dialysis patients, the costs of supplies, drugs, and laboratory tests were covered as for the outpatient. "Room charges," of course, were not applicable. Nursing services provided by

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Doctor Bunto is medical case consultant and Doctor Tremain is vice president for medical affairs with the Medical Affairs Division of Michigan Hospital Service. Mr. Kibe is research analyst with the Research Services Department.

the home care agency were covered, home care agency participation being a prerequisite to payment for home dialysis.

No payment (aside from reimbursement for administrative supervision) was made to the physician by Michigan Blue Cross. The physician was reimbursed by Michigan Blue Shield, but these expenditures were omitted from this report. Costs of the kidney machine itself were excluded. No payment was made to family members or friends for their training in conjunction with the training of the home dialysis patient. No payment was made for take-home drugs except those actually used in the dialysis procedure.

Sources of Data

There were 10 hospitals and seven home care agencies participating in this pilot project. Data were obtained from three sources: (1) hospital bills and "Start of Care Report" forms completed by hospital personnel; (2) home care agency bills, and (3) replies to a questionnaire sent to the attending physicians. The patients represented in this pilot study were regular Michigan Blue Cross subscribers. The study did not include Medicare or Medicaid patients, or patients whose hospitalization coverage came under a national Blue Cross account, such as Federal employees.

During the 30 months of the pilot project, a total of 161 patients were available for inclusion in the study. Of these, 23 patients had to be excluded for lack of any data. For expository purposes, the pilot study patients were classified into two basic categories: "Chronic Outpatient" and "Home Hemodialysis." Chronic outpatients received all of their dialyses at the outpatient facility of a hospital either (a) because the hospital in question offered only hospital-based chronic dialysis, (b) the hospital did not participate in the Michigan Blue Cross Coordinated Home Care Program, (c) the patients were unsuitable for home hemodialysis for one reason or another, or (d) for all reasons mentioned above. Home hemodialysis patients, except for health complications or equipment malfunction or both, dialyzed themselves at home with routine supervision from the Home Care agencies. The home hemodialysis patient category comprised not only those patients who were dialyzing themselves at home but also those recently admitted patients who were being trained for home hemodialysis. Of 138 patients included in the study, 49 were outpatients and 89 on home hemodialysis.

Data on basic patient characteristics such as the age and sex were extracted from "Start of Care Reports" provided by Michigan Blue Cross and completed by either the hospital personnel or social workers attending the patients. Financial data on such items as hemodialysis treatment room, supplies, drugs and laboratory tests were provided on standard Michigan Blue Cross billing forms.

Of the 10 hospitals, eight provided home dialysis training, and four of these also performed outpatient dialysis on patients who, for one reason or another, were deemed unsuitable for home dialysis training. A ninth hospital performed outpatient dialysis, but did not train patients for home dialysis, and the tenth hospital performed dialysis only as an interim measure while the patient awaited renal transplant.

Findings

Hospital and Home Care Agency Data

Table I shows the dialysis charges paid for outpatient dialysis in five hospitals. The average charges paid were about $18,900 per year, ranging from $14,200 to $29,500. Higher overall costs of running the dialysis program seems to be the reason for significantly higher annual dialysis charges at hospital D. The overall average charges paid in these five hospitals for a single outpatient hemodialysis were $159, ranging from $119 to $248. The overall average number of dialysis treatments per year was 119, ranging from 109 to 132.

TABLE I

Dialysis Charges Paid for Chronic Outpatients

Hospital	Charges Paid Per Dialysis	Annual Charges
Hospital B	$148.00	$17,600
Hospital D	248.00	29,500
Hospital E	131.00	15,600
Hospital H	147.00	17,500
Hospital J	119.00	14,200
Overall Average Per Dialysis	$159.00	
Overall Average Per Man-Year*		$18,900

*A man-year is defined as one patient undergoing dialysis for one year.

TABLE II

Home Hemodialysis Training Costs

Hospital	Training Period in Weeks	Charges Paid
Hospital A	12	$14,500
Hospital B	16	4,800
Hospital E	12	2,800
Hospital F	12	5,000
Hospital G	8	4,900
Hospital H	12	4,600
Hospital I	8	3,800
Hospital J	10	3,700
Average Training Period	11	
Overall Average Training Charges		$ 5,400

Table II shows the training periods and charges for patients being prepared for home dialysis. The average charges paid for training patients for home hemodialysis at eight hospitals were $5,400. The average length of training was 11 weeks, during which 28 dialyses were performed. Charges ranged from $2,800 to $14,500, the latter figure occurring in one hospital whose dialysis training program had just been started, with high "set-up" costs to be offset. The average cost of one dialysis during training for home dialysis was $194.

Table III shows the average charges per dialysis for patients dialyzing themselves at home. The overall charges paid for dialysis in patients' homes excluding the cost of the artificial kidney machine and its installation were $32.00, ranging from $16.00 to $48.00. The annual cost approached $7,400 per year, including two cannulations costing $250 each.

TABLE III

Average Charges Paid per Home Hemodialysis

Hospital	Average Charges Paid Dialysis
Hospital E	$34.00
Hospital F	48.00
Hospital G	32.00
Hospital H	16.00
Hospital I	36.00
Hospital J	28.00
Overall Average	$32.00

A comparison of the costs of outpatient and home hemodialysis is presented in **Table IV**.

One hospital not represented in the tables offered only a pre-transplant dialysis program, and therefore its charges were calculated separately from the other hospitals. The average dialysis costs for a patient awaiting a kidney transplant at this hospital were approximately $12,500, based on charges for 11 patients.

TABLE IV

Outpatient and Home Hemodialysis: Comparison of Man-Year Charges

Category	Charges Per Man-Year
Outpatient	$18,900
Home Hemodialysis	
a) First year	16,184
b) Subsequent years	7,372

Although each hospital divided its charges into room, supplies, laboratory and drugs, billing procedures were not sufficiently uniform to derive statistically meaningful data. Costs of visiting nurse supervision of home dialysis patients represented only one to three percent of the costs of home dialysis.

Ninety-five of the 138 patients were male (68.3 percent). The average age for males was 39, and for females 41, over 90 percent of both being between the ages of 15 to 54. During the 30 month period of the pilot study, there were 20 deaths.

One of the objectives of the pilot study was to enable Blue Cross to know the probable case-load of patients and resulting financial obligations for the immediate future. With this in mind, projections were made for the years 1973 and 1975 using the Delphi Method[5] (**Table V**). As a useful nonmathematical technique, the Delphi Method was developed by Dr. Olaf Helmer of the Rand Corporation to "obtain systematic combination of individual judgments to obtain a reasoned consensus." Probable financial obligations to Michigan Blue Cross were computed with the help of the following assumptions:

TABLE V

Hemodialysis Case Load Projections

Cases	1973	1975
Home Hemodialysis	472	719
Outpatient	166	180
Financial Obligations		
Home Hemodialysis	$3,598,000	$5,438,000
Outpatient	2,636,000	3,002,000
Total	6,234,000	8,440,000

1. The new cases occurring each year will be evenly distributed throughout the state.
2. Since Michigan's 1970 resident population is about 4.4 percent of the total United States population, it will remain approximately at 4.4 percent through 1975.
3. The proportion of home to chronic outpatient hemodialysis patients will increase from 65 percent in 1970 to 80 percent by 1975.
4. Of all kidney transplants which will be performed in the United States each year, 4.4 percent will occur in Michigan and the Michigan Blue Cross share of them will be in proportion to its enrollment share of the state population each year.
5. Fifty percent of kidney transplants on patients performed during a year will be successful. Of the remaining 50 percent, half of the patients will have a second transplant the following year and the other half will return to hemodialysis.

6. Mortality rates for hemodialysis patients will be 14 percent for the first year and 10 percent in subsequent years.
7. In estimating financial obligations, no "inflation factor" was used because it is very probable that charges incurred and paid for eligible subscribers will be more than offset by (a) larger percentage of patients being maintained on home hemodialysis and (b) less expensive machines being used. Hence, charges per man-year for both outpatient and home hemodialysis have been assumed to remain constant through 1975. Projections for 1973 and 1975 are presented in **Table V**, using cost models shown in **Figures 1 and 2.**

Physician Questionnaire Data

A questionnaire was sent to each physician for each patient included in the pilot project. The following data is derived from 103 completed questionnaires.

As **Table VI** shows, the most frequent primary diagnosis was chronic glomerulonephritis. Secondary diagnoses were not uniform—some were related to complications of hemodialysis rather than a disease related to or concurrent with the primary renal disease before dialysis. Uremia was reported in 25 cases, though undoubtedly it was present to some degree in all cases. Hypertension was reported in seven. Congestive heart failure was reported in three; renal amyloidosis was reported once.

TABLE VI

Frequency of Diagnosis (Primary)

Diagnoses	Number of Times Reported
Chronic glomerulonephritis	47
Polycystic kidneys	15
Chronic pyelonephritis	9
Chronic renal failure, etiology not specified or unknown	8
Malignant hypertension (nephrosclerosis)	4
Diabetic nephropathy	3
Chronic interstitial nephritis	2
Goodpasture's disease	2
Lupus erythematosus	2
Hydronephrosis	2
Alport's syndrome	1
Carcinoma of colon	1
"Congenital" nephritis	1
Radiation nephritis	1
Retroperitoneal fibrosis	1
Diagnosis omitted	4
Total	103

Of the 103 patients reported, 59 were either being dialyzed at home, or in training for home dialysis at the time the report was completed. In two instances, the patient managed the machine without another member of the family being trained.

Complications were reported in 89 of the 103 cases (86 percent). For 56 of the cases, there were two or more complications; in the other 33, only one complication was reported. Incidence by type of complication is shown in **Table VII.** Complications required inpatient hospitalization in 55 cases, or 53 percent. Of the 103 patients reported, 72 were male, and 31 female.

"Housewife" was given as the occupation in 28 of the female patients. Ten were able to adjust to their duties full-time, 17 part-time, and one not at all. The other three (nurse, student, waitress) worked either part-time. or not at all.

TABLE VII

Incidence of Complications

Complication	Number of Cases
Arterial or venous thrombosis	46
Cannula infection	43
Psychological or psychiatric problems	26
Peripheral neuropathy	24
Electrolyte imbalance	20
Disequilibrium syndrome	15
Anticoagulation problems	11
Abnormalities of calcium metabolism	5
Hypertension	4
Anemia (intractable)	2
Cardiac arrest	2
Septicemia or bacteremia	2
Hepatitis	2
Thrombophlebitis	2
Hypotension	1
Miscellaneous (CVA, congestive failure, pleural effusion, angina pectoris, ascites, fracture, detached retina, diabetes)	20

A wide variety of occupations was encountered in the male group, as would be expected. Overall, 15 were able to work full-time, 23 part-time, and 31 not at all. The occupation was either not specified, or designated "retired," in three cases.

The occupations and the extent to which the patient could engage in the work full-time, part-time, or not at all are shown in **Table VIII.**

Twenty-five of the 103 patients found it necessary to change their occupation, and of these five were involved in vocational rehabilitation. No information was received on seven patients concerning change of occupation.

Patients were seen weekly, or more often, while in training for home dialysis, or as a regular outpatient. Replies to the questionnaire indicated that home dialysis patients requiring the physician's attention one to three times per month, and those requiring it less often than monthly, were about equal in number.

In 18 of these patients, a renal transplant had been done once, and in three others, had been done twice. However, only five of the 21 transplant recipients required hemodialysis as a result of

FIGURE 1

Cost Model: One Dialysis in a Training Center (Travenol RSP Coil Unit)

Personnel	Amount*
Administration (Medical and Clerical)	$ 33.00
Physicians (including trainees)	24.00
Nurses - Technicians	43.00
Psychiatrist Psychologist Social Worker — Services	10.00
Dietitian	2.00
	$112.00
Supplies (Administration, Nurse, Tech., Training, Consumable Supplies)	30.00
Other (Laboratory Tests, Books, Periodicals, etc., and Communications)	13.00
Overhead	39.00
Total Indirect Charges (35% of Salary and Wages)	
Total Cost of One Dialysis in a Training Center	$194.00

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*Source: Pilot Study Data

FIGURE 2

Cost Model:* Home Hemodialysis

First Year

Training Period		
Initial Cannulation	$ 250.00	
In-center Training Dialyses: 28 @ $194.00	5,432.00	
		$ 5,682.00
Equipment		
Purchase Cost**	4,200.00	
Freight Charges and Installation (Est.)	400.00	
		$ 4,600.00
Home Dialysis		
Second Cannulation	250.00	
116 Dialyses @ $32.00 performed at home	3,712.00	
Back-up Dialyses: (In-center) 10 Dialyses @ $194.00	1,940.00	
		$ 5,902.00
Total Costs (First Year)		$16,184.00

Second Year

Cannulations: 2	$ 500.00	
Planned Home Dialyses 142 @ $32.00	4,544.00	
Back-up Dialyses (In-center) 12 @ $194.00	2,328.00	
		$ 7,372.00

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*Assumptions:

1. Percentage of Back-up Dialyses is 8 for the first year.
2. Average number of cannulations per year is 2.
3. Figures based on three dialyses per week.

**Data supplied by the Kidney Foundation of Michigan, Ann Arbor, Michigan, June 21, 1971.

TABLE VIII
Occupations of Male Hemodialysis Patients

Type of Occupation	Number Employed Full-Time	Part-Time	Not at All
Sedentary (auditor, accountant, secretary, tailor, clerk, cashier, executive, supervisory, managerial, dispatcher)	2	8	4
Skilled trades (tool and die, press, mechanic, machinist, plumber, technician)	1	4	7
Professional (dentist, doctor, lawyer, engineer, teacher, professor)	4	6	3
Unskilled labor	1	2	11
Self-employed	4	0	0
Student	3	2	3
Salesman	0	1	3
	15	23	31

failure of a transplant, so it may be assumed that 16 of the 103 patients were transplanted some time during the pilot project period, and that they had not yet failed at the time the report was submitted. In 16 others, a transplant was being planned at the time the questionnaire was returned, and in 18 cases a transplant had been refused.

Summary and Conclusions

Michigan Blue Cross, from September 1, 1968 to March 31, 1971, conducted a hemodialysis pilot project in which payment was made on behalf of 161 patients. Data were obtained on 138 patients. The study included both patients undergoing repetitive dialysis at the hospital and patients dialyzing themselves at home. The cost of disposable supplies, "room charges," laboratory tests, drugs and home care agency nursing services were covered. Data were also obtained from a questionnaire completed by the attending physicians for 103 patients.

The average cost of a single dialysis performed at the hospital was $159. For patients in training for home dialysis, it was $194. A single home dialysis averaged $32. Repetitive outpatient hospital dialysis averaged $18,900 per year. Home dialysis averaged $16,184 the first year, and $7,372 each subsequent year.

Michigan Blue Cross projected expenses for outpatient and home hemodialysis coverage are $6,234,000 by 1973, and $8,440,000 by 1975.

Chronic glomerulonephritis was the most frequently reported kidney disease. Dialysis was accompanied by a complication in 86 percent of cases, the most frequent being arterial or venous thrombosis. Interestingly, 31 of 69 male patients were unable to work at their usual occupation despite hemodialysis.

There is no question that the cost of hemodialysis is prohibitive for most individuals, and that third-party coverage is not only desirable but virtually mandatory. Since July 1, 1971, Michigan Blue Cross has added outpatient and home hemodialysis as a benefit for all Michigan group subscribers.

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Acknowledgements

The authors are indebted to Mac J. Armstrong, MD; Norma L. Beerweiler, RN, MPH, and Henry F. Vaughan, AB, MPH, for their valuable assistance and support throughout the pilot project and in the preparation of this manuscript.

Value of the neurological examination, electromyography and myelography in herniated lumbar disc

By Harold D. Portnoy, MD
Manzoor Ahmad, MD
Pontiac

Particularly in an industrialized state such as Michigan, physicians see many patients with low back pain. In most cases the differential diagnosis is between herniated lumbar disc and lumbosacral strain. Sometimes the diagnosis is clear, but frequently differentiating these two entities is difficult.

If the diagnosis is ruptured disc, then how long should conservative management be tried, when should surgery be contemplated, and what is the exact level of the herniation?

To answer these questions a study was undertaken to determine the value of each of the three currently available diagnostic measures for differentiating lumbosacral strain from herniated lumbar disc, namely, the neurological examination, electromyography, and myelography.[1-11] In addition these three tests were evaluated as to the accuracy of localization of a ruptured disc. As a result of the study a scheme for the evaluation and treatment of patients with low back pain will be presented.

Material and Methods

The study was undertaken on 138 consecutive patients operated upon for ruptured lumbar intervertebral disc from July 1964 through June 1969. Each had been evaluated by electromyography (EMG) and myelography. These patients presented with low back pain, usually with unilateral leg radiation, and were initially seen either in the office or in hospital consultation. None had prior surgery. There were 98 males (64.5%) and 49 females (32.5%). The great majority of patients (60.1%) were in the 4th and 5th decades (**Table 1**). The youngest patient was 13 years old; the oldest, 71. This distribution by age and sex is similar to that reported in other series.[5,10,12] In this series 54.3% of the patients had left-sided pain; 44.2%, right-sided pain. A similar left-sided preponderance was likewise noted by O'Connell.[8] In 1.5% of patients, the pain did not localize to either side. There were 126 Caucasian and 11 Negro patients.

TABLE 1

Age Distribution

Decade	No. of Patients	Percent
11-20	4	2.9
21-30	20	14.5
31-40	38	27.5
41-50	45	32.6
51-60	25	18.2
61-70	5	3.6
71-80	1	0.7
Total	138	100.0

The neurological examination (NE) was carried out in a uniform manner. The following were evaluated as non-specific indicators of ruptured disc: 1) straight leg raising (Lasèque's sign), 2) the presence of paravertebral muscle spasm (PVMS), 3) the presence of a lumbar list.

Clinical localization was determined according to the following criteria as modified after Spurling.[12]

L_3 disc herniation (L_4 nerve root compression): 1) diminished or absent knee jerk (KJ) with normal ankle jerk (AJ); 2) weakness of the quadriceps femoris; 3) hypesthesia along the medial aspect of the leg.

L_4 disc herniation (L_5 nerve root compression): 1) normal KJ and AJ; 2) weakness of the extensor hallicus longus muscle (EHL) and dorsiflexion of the foot; 3) hypesthesia along the anterior aspect of the leg, medial side of the foot and great toe.

L_5 disc herniation (L_5 nerve root compression): 1) diminished or absent AJ; 2) weakness of the gastrocnemius and soleus muscles; 3) hypesthesia on the lateral aspect of leg and foot, and the third, fourth and fifth toes.

Electromyography was performed routinely on each patient. Nerve root irritation was considered present if fibrillations or positive sharp waves were found in the muscles supplied by the root. Only two patients had positive sharp waves alone. In one patient the lesion was less than 18 days

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Doctor Portnoy is attending neurosurgeon at Pontiac General Hospital, where Doctor Ahmad was formerly a resident in surgery.

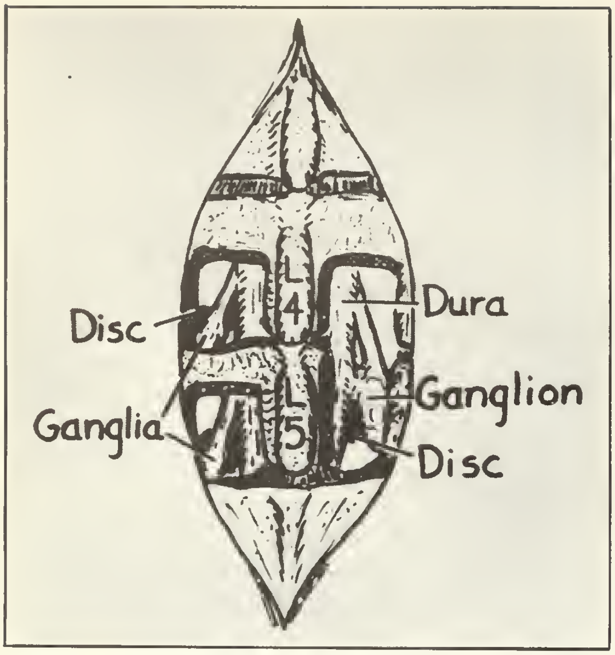

Figure 1: Sketch illustrating two anomalies noted at surgery for herniated disc. Left side: Intraspinal dorsal root ganglia overlying bulging discs at L_4 and L_5 interspaces. Right side: conjoined L_5 and S_1 nerve roots forming a conjoined root with dorsal root ganglion within the spinal canal and overlying a bulging disc.

old, that is, before fibrillations would be expected. Two patients with a normal EMG were studied less than 18 days from onset of symptoms.

Each myelogram was carried out by the cooperative efforts of a neurosurgeon and radiologist. Following insertion of an 18 gauge spinal needle, cerebrospinal fluid manometrics were performed and three to 10 cc. of fluid removed for analysis. Six cubic centimeters of Pantopaque were introduced into the lumbar subarachnoid space. The radiopaque media was manipulated under fluoroscopy using an image amplifier. The Pantopaque was passed into the lower thoracic area to rule out the presence of a tumor of the conus medullaris. Cross table lateral roentgenograms were obtained when necessary.

In **Table 2** is listed the distribution of the disc herniations found at operation. Operative exploration of each disc protrusion or protrusions was based on the preoperative evaluation of the NE, EMG, and myelogram. When the tests suggested more than one level of involvement, both levels were explored. Except in four instances, unilateral hemilaminectomy at one or more levels was performed. Bilateral exploration was carried out twice. Two patients had complete laminectomy at one of two explored levels. Associated bony spurs were felt to play a part in the etiology of the nerve root compression in five cases, and epidural varicosities considered significant in the production of symptoms in two. Two patients had anomalous nerve roots.[1] The L_5 and S_1 dorsal root ganglia in one patient were within the spinal canal and directly overlay small bulging discs. (**Fig. 1**, left side). The other patient demonstrated a conjoined L_5 and S_1 nerve roots with common intraspinal dorsal root ganglion. A single root emerged at the L_5-S_1 intervertebral foramen. The ganglion overlay a bulging disc. (**Fig. 1**, right side).

One patient with an old fracture of L_2 had a ruptured disc between L_1 and L_2. A sacralized fifth lumbar segment was noted twice and six lumbar vertebrae were found in 10 patients. Spondylolesthesis of the fifth lumbar on the first sacral segment was seen in three instances. Three patients had a spina bifida occulta.

Results

Neurological Examination: Lasèque's sign was positive in 83.3% of the patients with lateralization to the affected side in all but one case in which both legs were equally involved (**Table 3**). PVMS was noted in 68.2% of patients. Unilateral PVMS was found on the same side as the lesion in 31.2%, on the opposite side in 2.9%, and bilaterally in 34.1%. A lumbar list with tilt to the side of the lesion was noted in 25.4%, and to the opposite side in 17.4%.

The NE was correlated with the disc lesions found at operation (**Table 4**). Correct localization to the involved disc level or levels *alone* was noted

TABLE 2

Operative Distribution of Disc Herniation

Level	Number	Percent
L_1	2	1.4
L_3	4	2.9
L_4	39	28.3
L_5	46	33.4
L_3, L_4	2	1.4
L_4, L_5	43	31.2
L_5, L_6	1	0.7
L_3, L_4, L_5	1	0.7
Total	138	100.0

TABLE 3

Nonspecific Signs of Lumbar Ruptured Disc

		No.	Percent
SLR		115	83.3
PVMS	same side	43	31.2
	opposite side	4	2.9
	bilateral	47	34.1
Lumbar list			
	same side	35	25.4
	opposite side	24	17.4

TABLE 4

Correlation of Level of Ruptured Disc with Neurological Examination

	L_1 (2)	L_3 (4)	L_4 (39)	L_5 (46)	L_3, L_4 (2)	L_3, L_4, L_5 (1)	L_4, L_5 (45)	L_5, L_6 (1)
Depressed KJ	1	3	4		1			1
Depressed AJ		1	19	38	2		31	1
L_2	1							
L_3	1							
L_4		1	1		1			
L_5			15	8	1		22	
S_1			11	25	1		29	1
Correct localization (level or levels)		2	9(23.1)	34(73.8)			23(51.1)	
Correct localization and additional false pos. ..	1	1	14(35.9)	9(19.6)			1(2.2)	1
Correct localization and additional false neg. ...					2		15(33.3)	
No localization	1	1	7(17.9)	2(4.3)		1	4(8.9)	
False localization only			9(23.1)	1(2.2)				

Dermatome
Hypesthesia

TABLE 5

Correlation of Level of Disc Rupture and EMG

	L_1 (2)	L_3 (4)	L_4 (39)	L_5 (46)	L_3, L_4 (2)	L_3, L_4, L_5 (1)	L_4, L_5 (43)	L_5, L_6 (1)
Correct localization (level or levels)		4	20(54.3)	31(67.5)			15(34.9)	
Correct localization and additional false pos.			7(17.8)	2(4.3)				
Correct localization and additional false neg.					2	1	20(46.4)	1
Normal EMG	2		8(20.5)	9(19.5)			8(18.6)	
False localization only			4(10.2)	4(8.7)				

in only 49.3% of the entire group, greatest accuracy being found in determining a L_5 herniation. In patients with a L_4 ruptured disc, correct localization occurred in only one quarter of the cases. Of interest is that in patients with isolated L_4 ruptured disc there was clinical indication of an additional false positive herniation (usually L_5) in 35.9%, no localization in 17.9% and false localization in 23.1%. In patients with combined L_4 and L_5 ruptured discs, both lesions were diagnosed in only one-half the cases. In one-third of the patients, only one of these two herniations could be diagnosed.

Electromyography: Fully correct localization was accomplished in only 50.7% of the patients (Table 5), greatest accuracy occurring with a L_5 disc rupture (67.5%). In an additional 23.9% of the patients, the correct level(s) was diagnosed, but an uninvolved level was also incriminated, or the test failed to detect a second herniation. The EMG was normal in 18.8% of cases and indicated the wrong level in 5.8%. In patients with a L_4 herniation, the test proved entirely accurate in 54.3%, and in combined L_4 and L_5 herniations, 34.9%.

Myelography: Correct localization occurred in 82.6% of patients (Table 6). The myelogram was normal in 6.5%. In 10 cases or 23.3% of combined L_4 and L_5 ruptured discs the myelogram detected only one of the 2 lesions. In four patients with lateral rupture of a disc, the dural sac was narrow and did not fill out the spinal canal[13]

For reprints write to: Harold D. Portnoy, MD, Oakland Neurological Clinic, 445 W. Huron St., Pontiac. (After July 1: 1431 Woodward, Bloomfield Hills)

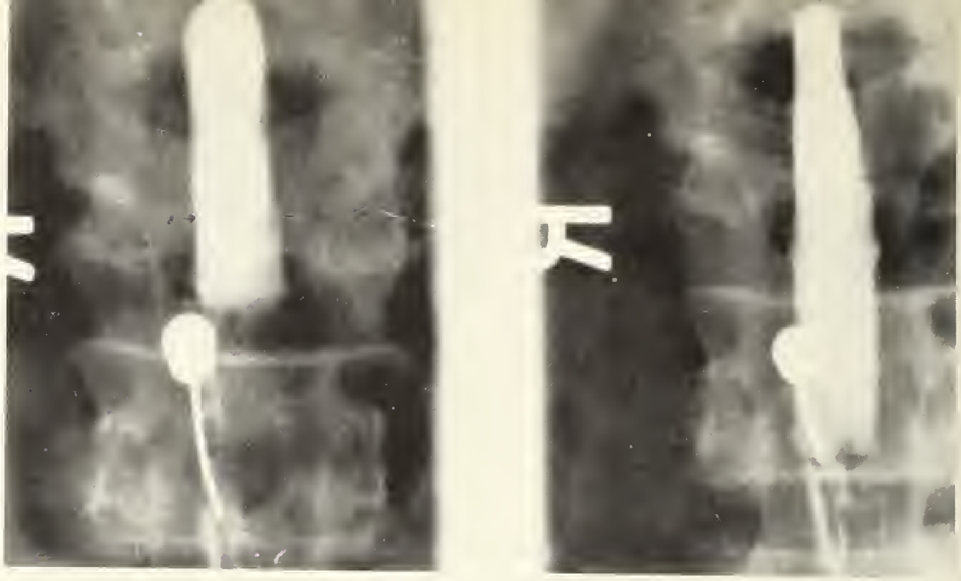

Figure 2: Myelogram which failed to reveal evidence of the bulging disc at left L_4 and free fragment at L_5 found at surgery. This patient had a weak extensor hallicus longus and positive EMG indicating nerve root irritation of the left L_5 root. The dural sac is narrow relative to the bony canal and both lesions were found laterally.

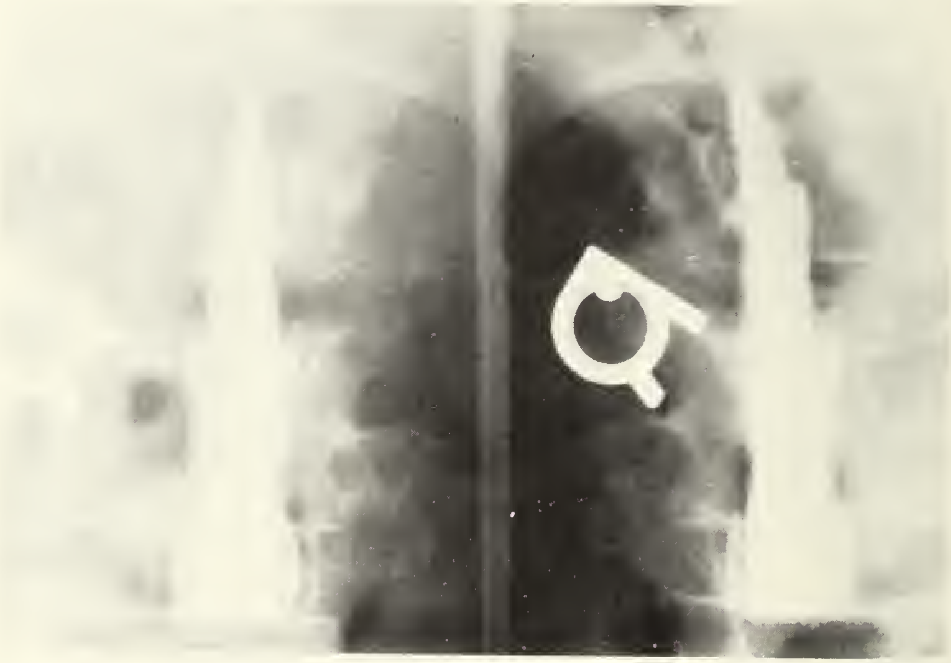

Figure 3: Myelogram which failed to reveal ruptured disc at left L_5. Note the dural sac terminates at the lumbosacral interspace.

(Fig. 2). In one patient with a ruptured L_5-S_1 disc, the dural sac ended at the lumbosacral interspace (Fig. 3).

Of 132 cerebrospinal fluid specimens obtained at myelography, 76 (57.5%) had an elevated protein (over 45 mgm%). The highest protein concentration was 137 mgm%. Cerebrospinal fluid lactate dehydrogenase isozyme studies from some of these patients indicate the abnormal protein is a product of red blood cell breakdown.[14] This suggests the increased protein is due to an increased permeability of the local vasculature probably secondary to compression by the protrusion.

Discussion

The proper management of a patient with a herniated lumbar disc necessitates an accurate diagnosis and localization of the lesion. In many

TABLE 6

Correlation of Level of Ruptured Disc and Myelography

	L_1 (2)	L_3 (4)	L_4 (39)	L_5 (46)	L_3, L_4 (2)	L_3, L_4, L_5 (1)	L_4, L_5 (43)	L_5, L_6 (1)
Correct localization level or levels	2	4	37(94.8)	43(93.4)	1	1	26(60.4)	
Correct localization and additional false pos.			1(2.6)				1(2.3)	1
Correct localization and additional false neg.							10(23.3)	
Normal myelogram				3(6.6)			6(13.9)	
False localization only			1(2.6)					

instances diagnosis or localization may be obscure. Low back and leg pain may present in a variety of diseases most of which are eliminated by a good history and physical examination. The most frequent diagnostic problem lies in differentiating acute or chronic lumbosacral strain from true ruptured disc. Both problems are usually related to trauma, and the pain of a lumbosacral strain can mimic a ruptured disc. The trauma may be quite slight such as bending over to pick up a small object. Such a maneuver probably causes a tear of the spinal ligaments or annulus fibrosus with resultant reflex muscle spasm as the paraspinal musculature cease functioning at 60-75° of flexion.[15] In this situation stress is suddenly transferred from muscles to ligaments.

Those patients with lumbosacral strain fail to show neurological deficit and usually improve on a conservative program of bedrest, analgesics, muscle relaxants, and the use of moist heat to the lumbosacral area. Fortunately, many patients with minor neurological changes, suggestive of disc rupture, such as a slightly depressed ankle jerk or hypesthesia, also improve on conservative therapy.[8]

The first and most important method of evaluating patients with low back pain is the clinical examination which includes a careful neurological examination. In this series we found that the straight leg raising test was a good indicator of a ruptured disc when performed properly (83.3% positive). Patients with acute lumbosacral strain may also have a simulated Lasèque's sign, which is caused by simultaneous flexion of the pelvis on the lumbar spine. A true straight leg raising test will disappear when the knee is flexed. In contrast the presence of paravertebral muscle spasm and lumbar list has not been helpful in differentiating lumbar disc disease from lumbosacral strain.

The neurological examination was found to be most helpful in differentiating herniated disc from simple strain but could not be relied upon for accurately diagnosing the level of herniation. Thus while 88.6% of the patients in this series had an abnormal neurological examination, accurate localization was obtained in only 49.3%. A patient with a positive straight leg raising test and abnormal neurological examination usually has a ruptured disc. But all patients with a ruptured disc need not be operated upon except in instances where the neurological deficit is significant or progressive. A trial of conservative therapy is indicated in most situations. Thus, many patients with a slightly depressed ankle jerk or hypesthesia may weather the episode on conservative management, and not require surgery.

We have found electromyography (EMG) of considerable value as an adjunct to the neurological examination, particularly in instances where the only neurological deficit was sensory loss since the presence of fibrillations specifically indicates the presence of nerve damage. Obtaining an EMG early is valuable since development of an abnormality on repeat study indicates a progressive lesion, while clearing of an abnormality is objective evidence of improvement. The EMG has also been found helpful in compensation cases in which the clinical picture is obscure, and in which compensation neurosis must be considered.[16] An abnormal EMG in this situation indicates that the complaints are most likely due to nerve root irritation.

The conservative care of patients with low back pain in most instances can be carried out at home unless significant neurological deficit is present. Premature hospitalization may be detrimental since conservative therapy tends to be shortened in favor of myelography and operative intervention. Both should not be considered benign procedures. We have found a program of complete bedrest at home with a couple of pillows under head and knees (simulating the William's position of the hospital bed), analgesics and muscle relaxants relieve symptoms in the majority of patients with low back pain. If pain is severe and persistent, particularly if the EMG is abnormal, admission to hospital is indicated. Further conservative therapy in the hospital including deep moist heat and massage and pelvic traction will benefit many patients, thus again avoiding surgery. Once the diagnosis of intractable pain from a herniated disc has been made on the basis of the neurological examination, EMG, futile trial of conservative therapy, and significant neurological deficit, surgery should be considered. Myelography is carried out only as a precursor to surgery to prevent misdiagnosis (such as with the presence of a conus medullaris tumor), and to clearly establish the level of the lesion. Myelography should not be used as a screening procedure to make the diagnosis of ruptured disc, since occasionally it may result in arachnoiditis. Because myelography most accurately defines the correct level (82.6% of patients compared to only 50% of patients studied by either the neurological examination or EMG alone), we feel myelography should be performed before surgery to accurately localize the lesion rather than investigate multiple interspaces when not necessary.

While myelography appears to present the best test available for accurate localization, it was found to be normal in nine cases (6.5%). In all but one of the patients with a normal myelogram, the EMG was positive. A normal myelogram is not an absolute contraindication for surgery, but a cause to reflect on a possible wrong diagnosis. When myelography and electromyography are both negative, re-evaluation of the clinical status possibly by another orthopedic surgeon or neurosurgeon should be considered before exploratory surgery.

The above plan for evaluating a patient with low back pain utilizes the neurological examination, EMG, and myelography as methods of preventing unnecessary surgery whenever possible. The simplest, but unfortunately, least accurate tests are used first. Myelography is used prior to surgery to prevent misdiagnosis and to most accurately determine the level of disc rupture.

Summary

One hundred and thirty-eight patients with a ruptured lumbar disc at surgery were evaluated preoperatively by clinical neurological examination, EMG, and myelography. The neurological examination and EMG were fully accurate in only 50% of patients and partially accurate in approximately an additional 25%. Myelography was found to be the most accurate (82.6%) for localization of a ruptured disc. In another 8.0%, only one of two disc protrusions were detected.

The neurological examination and EMG are valuable in initially evaluating the patient with low back pain. If the EMG is positive and the patient fails to improve on conservative therapy at home, then hospitalization for controlled conservative therapy is indicated. Neurological deficit and failure to improve on conservative therapy are indications for surgery. Myelography is performed prior to surgery to prevent misdiagnosis and determine the level of the lesion.

Acknowledgement

The authors wish to thank Dr. Nicholas Cherup who performed most of the EMG examinations.

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Zero population growth

An analysis of its implications for Michigan

By Kurt Gorwitz, ScD
Ch. Muhammad Siddique
Lansing

Introduction

Widespread recognition has evolved in recent years regarding the dangers of continuing population growth at present levels. Despite a substantial decrease in birth and fertility rates in recent years, the number of Michigan residents is currently increasing 1.1 percent annually, due to an excess of births over deaths. In-migration and out-migration are virtually in balance. This growth, if unchecked, would lead to a doubling of the state's present population within less than seventy years. In a number of foreign countries, and among some segments of our population, the annual growth rate is 3.5 percent. This produces a doubling of the population every 20 years.

Awareness of the dangers inherent in uncontrolled growth has led to a number of proposals for checking or reducing this expansion. One of the most widely recognized is commonly referred to as zero population growth (ZPG), a term which within a few years has become part of the English language. It is not, as apparently thought by some, a concept based on an immediate balance between live births and deaths. This patently is not attainable for some time since it would require that the average number of children per family be limited to less than 1.3. Michigan, as well as the United States, currently has about twice as many births as deaths. Rather, under the ZPG concept, each generation of women would have only enough children to reproduce itself.

Based on present survivorship rates, this would be equal in Michigan to an average of 2.11 children per woman. The current, actual figure is 2.56. This reduction of 18.4 percent, from the 170,510 reported in 1970 to 139,170 births, would decrease the annual fertility rate from the present 85.3 per 1,000 to 70.3. If women were to continue having this average of 2.11 children, a gradual aging of the population would occur, with a resultant decrease in the number of births and a concomitant increase in deaths. Ultimately, around 2030, a balance would be reached between the two which would subsequently remain essentially unchanged.

Analysis of Data

The number of Michigan residents increased 1,051,889, or 13.4 percent, between 1960 and 1970 (from 7,823,194 to 8,875,083). Almost all of this rise (96.7 percent) was the result of an excess of live births over deaths. In-migration slightly exceeded out-migration with the difference accounting for the remaining 3.3 percent. If this growth rate were to continue, Michigan's population would total 10.1 million in 1980, 13.0 million in 2000, 16.7 million in 2020 and 21.5 million in 2040.

In estimating the effect of zero population growth on Michigan's future population size, the following assumptions have been used:

1. In-migration would equal out-migration.

   The two have been in balance in recent years, and there is no reason for assuming that this will change.

2. Age-specific death rates for males and females would remain constant at present levels (**TABLE 1**).

   In almost all age and sex groups, death rates changed only negligibly during the past decade. This is expected to continue unless a cure or method of prevention is found for one or more of the leading causes of death (i.e., heart disease or cancer).

3. Age-specific birth rates would remain constant at levels computed by multiplying all current rates by $\frac{2.11}{2.56}$ (**TABLE 2**).

   In recent years, birth rates decreased most rapidly among older women (35-44) and least among younger (15-19) (**TABLE 3**). The former are now at a very low level and it therefore does not seem likely that women in this age group could account for a disproportionate share of further decreases in the number of births.

Should the above occur, we could then anticipate that

Doctor Gorwitz is chief of the Center for Health Statistics, Michigan Department of Public Health. Mr. Siddique, a candidate for the MSPH degree at the School of Public Health, University of North Carolina, served his field training at the Center.

TABLE 1

Age-Specific Death Rates (Per 1,000 Estimated Population in Specified Age and Sex Group) Michigan, 1970

Age (in years)	Total	Male	Female
Less than 1	21.65	24.72	18.47
1- 4	0.85	0.97	0.73
5- 9	0.45	0.54	0.36
10-14	0.40	0.49	0.31
15-19	1.11	1.63	0.58
20-24	1.43	2.33	0.64
25-29	1.66	2.28	1.10
30-34	1.40	1.87	0.96
35-39	2.06	2.55	1.61
40-44	3.80	4.78	2.81
45-49	6.18	7.80	4.60
50-54	9.84	12.76	6.97
55-59	13.77	18.48	9.27
60-64	20.47	27.89	13.59
65-69	31.72	41.01	22.98
70-74	49.17	61.47	38.22
75-79	66.13	86.51	51.48
80-84	112.46	140.32	94.67
85 or more	193.03	212.98	181.70

TABLE 2

Age-Specific Birth Rates (Per 1,000 Females in Specified Age Group) and Adjusted Age-Specific Birth Rates (On the Basis of ZPG) Michigan, 1970

Age of Mother (in years)	Birth Rate	Adjusted Birth Rate
10-14	0.888	0.732
15-19	65.020	53.569
20-24	171.225	141.071
25-29	173.938	143.306
30-34	64.441	53.092
35-39	27.319	22.508
40-44	8.914	7.344
45-49*	0.553	0.456

*Includes a few births to mothers older than this

1. The number of Michigan residents will increase an average of about 0.5 percent per year until 2030 as compared with a current, actual growth rate of 1.1 percent annually.

   The present population of 9,000,000 should reach a maximum 12,000,000 around 2030 and will decline slightly thereafter. This latter figure is 6.9 million (or 36.5 percent) less than the 18,900,000 residents anticipated on the basis of a continuation of current, actual growth rates (**TABLE 4**).

2. The median age of the population will increase an average of 0.16 years annually, from the present 26.5 to 36.3 by 2030 (**TABLE 5**).

   By that year, 15.2 percent of the population will be 65 years of age or older compared with the current 8.4 percent. Conversely, the proportion under 20 will decrease from 40.3 to 28.3 percent. Those between 20 and 64 will increase from the present 51.3 to 56.5 percent of the total population.

3. The number of residents under 15 years of age will decrease 4.9 percent by 2030. All other age groups will increase (15 to 24 – 1.0%; 25 to 44 – 50.8%; 45 to 64 – 62.7%; 65 to 84 – 151.2%; 85 and over – 43.9%).

   While the largest percentage increase will be between 65 and 84, the largest numerical rise will be between 25 and 44 years of age. This group accounted for 24.7 percent of the total population in 1970 and is expected to include 27.5 percent of all residents in 2030.

4. The ratio of dependent (under 20 and 65 or more) to working age (20-64) population will decrease from 0.95 to 1 in 1970 to 0.77 to 1 in 2030.

   This changing ratio reflects the sum of two divergent trends. While the ratio of older to working age population will rise (from 0.16 to 1 in 1970 to 0.27 to 1 in 2030), the ratio of younger to working age population will drop (from 0.79 to 1 in 1970 to 0.50 to 1 in 2030). That is, while less than one-sixth of the dependent population now is 65 or older, by 2030 this will be more than one-third.

5. Due to the gradual aging of the population, the crude death rate will increase an average

TABLE 3

Total Fertility Rates and Age-Specific Birth Rates by Color

United States, 1940, 1950, 1960-1968

Year and Color	Total Fertility Rate	Age of Mother (in years)							
		10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49
TOTAL									
1968	2,476.8	1.0	66.1	167.4	140.3	74.9	35.6	9.6	0.6
1966	2,736.1	0.9	70.6	185.9	149.4	85.9	42.2	11.7	0.7
1964	3,207.5	0.9	72.8	219.9	179.4	103.9	50.0	13.8	0.8
1962	3,473.5	0.8	81.2	243.7	191.7	108.9	52.7	14.8	0.9
1960	3,653.6	0.8	98.1	258.1	197.4	112.7	56.2	15.5	0.9
1950	3,090.5	1.0	81.6	196.6	166.1	103.7	52.9	15.1	1.2
1940	2,301.3	0.7	54.1	135.6	122.8	83.4	46.3	15.6	1.9
WHITE									
1968	2,368.4	0.4	55.3	162.6	139.7	72.5	33.8	8.9	0.5
1966	2,609.2	0.3	60.8	179.9	146.6	82.7	40.0	10.8	0.7
1964	3,073.7	0.3	63.2	213.1	176.2	100.5	47.7	13.0	0.7
1962	3,347.5	0.4	73.1	238.0	187.7	105.2	50.2	14.1	0.8
1960	3,532.9	0.4	79.4	252.8	194.9	109.6	54.0	14.7	0.8
1950	2,976.8	0.4	70.0	190.4	165.1	102.6	51.4	14.5	1.0
1940	2,229.1	0.2	45.3	131.4	123.6	83.4	45.3	15.0	1.6
ALL OTHER									
1968	3,196.9	4.4	133.3	200.8	144.8	91.2	48.6	15.0	1.2
1966	3,614.9	4.0	135.5	228.9	169.3	107.9	57.7	18.4	1.4
1964	4,153.4	4.0	138.7	268.6	202.0	127.5	67.5	20.9	1.5
1962	4,395.8	3.9	144.6	285.7	217.4	132.4	72.0	21.7	1.5
1960	4,522.1	4.0	158.2	294.2	214.6	135.6	74.2	22.0	1.7
1950	3,928.3	5.1	163.5	242.6	173.8	112.6	64.3	21.2	2.6
1940	2,870.2	3.7	121.7	168.5	116.3	83.5	53.7	21.5	5.2

of 0.7 percent per year, from the present 8.8 (per 1,000 population) to 12.8 in 2030.

The annual number of deaths will then be double the current figure. Chronic conditions related to old age should cause an increasing proportion of this increasing number of deaths. That is, unless major cures or preventive measures are found, the number of deaths from causes such as heart disease, cancer, vascular lesions, diabetes, and arteriosclerosis should rise significantly.

6. Due to the declining proportion of women in the child bearing ages, the crude birth rate will decrease an average of 0.3 percent per year, from the present 15.7 (per 1,000 population) to 13.0 in 2030.

Despite this gradually declining rate, the number of live births will increase (reflecting the growth in the total population) and then reach a plateau somewhat above current levels.

7. Due to the greater life expectancy of women at all ages (**TABLE 6**), the current excess of females in the older age groups will widen considerably.

At present, in the age group 65 to 84, there are 120 females for every 100 males. By 2030, this ratio will be 144 to 100. Among those 85 or older, there are presently 177 females for every 100 males. By 2030, this ratio will be 254 to 100. The number of females 65 or older will in-

TABLE 4

Estimated Population Based on Present Growth Rate and ZPG

Michigan, 1970-2040

Year	ESTIMATED POPULATION		DIFFERENCE	
	Based on Present Growth Rate	Based on ZPG	Number	Percent
1970	8,901,381	8,901,381		
1980	10,068,306	9,607,064	461,242	4.6
1990	11,422,084	10,421,627	1,000,457	8.8
2000	12,957,881	11,026,545	1,931,336	14.9
2010	14,700,180	11,424,558	3,275,622	22.3
2020	16,676,745	11,828,016	4,848,729	29.1
2030	18,919,339	12,017,783	6,901,556	36.5
2040	21,462,792	11,967,431	9,495,361	42.8

TABLE 5
Estimated Population Distribution by Age
Michigan, 1970-2040

	YEAR							
Age (in years)	1970	1980	1990	2000	2010	2020	2030	2040
0-14	2,710,440	2,341,060	2,498,333	2,637,624	2,437,058	2,490,225	2,579,131	2,478,696
15-24	1,589,470	1,894,503	1,579,445	1,574,967	1,773,675	1,623,735	1,605,730	1,712,650
25-44	2,194,971	2,614,788	3,400,942	3,320,849	3,013,796	3,267,083	3,310,699	3,148,215
45-64	1,658,383	1,876,794	1,947,926	2,346,327	3,039,066	2,929,578	2,698,615	2,911,497
65-84	701,227	835,223	949,551	1,088,493	1,098,078	1,443,573	1,761,346	1,610,049
85 or more	46,890	44,696	45,430	58,285	62,985	73,822	62,262	106,324
Total	8,901,381	9,607,064	10,421,627	11,026,545	11,424,658	11,828,016	12,017,783	11,967,431
Median	26.5	28.3	31.8	33.6	35.1	35.3	36.3	36.3

crease 163.0 percent by 2030 compared with a 120.1 percent rise for males.

8. The median age of Michigan's female residents will increase more rapidly than for males.

   The median age of females in 1970 was 27.4, or 1.9 years more than the 25.5 for males. By 2030, the female median age will be 37.5, or 2.3 years more than the 35.2 projected for males. This widening disparity primarily reflects the greater increase of females in the older age groups.

Discussion

A discussion of zero population growth properly should focus on three major areas. The first of these is that it has a number of important implications which have not as yet been fully recognized. The most apparent is the resultant aging of the population with a sizeable reduction in the proportion of younger residents and a concomitant increase of those 65 years of age or older. Thus for example, we can anticipate that the need for additional school teachers will be minimal unless present faculty-student ratios are increased substantially. If the number of new teachers is not reduced drastically, we must expect the current excess in all but a few subject areas of this profession to evolve into a chronic problem. Related to this, most future school construction will be limited to new residential areas and to replacement of obsolete units. Conversely, the number of retirement villages, nursing homes and other special facilities for older residents should continue to rise.

TABLE 6
Average Life Expectancy by Age and Sex
Michigan, 1970

	Average Life Expectancy (years)		
Age (in years)	Total	Male	Female
0	70.3	66.9	74.2
5	67.0	63.7	70.6
15	57.3	54.0	60.9
25	47.9	45.0	51.2
35	38.6	35.8	41.7
45	29.6	26.9	32.5
55	21.6	19.2	24.1
65	14.6	12.8	16.3
75	9.2	7.9	10.2
85	5.2	4.7	5.5

Among physicians, growth should be concentrated in specialties such as gerontology, cardiology, surgery and psychiatry. The need for obstetricians and pediatricians should remain close to present levels. Commonly recommended ratios of physicians to general population will no longer be applicable since the larger number of older residents should produce a higher utilization of medical services. Obstetrics wards, which in most cases now operate at 50-65 percent of capacity, should not expect any sizeable increase in patients. Accelerated efforts at merger or reduction in bed capacity should therefore be anticipated.

Not so apparent is the large expected increase in the working age population. The number of residents between 20 and 64 will rise nearly 50 percent (or more than two million) at the same time that the need for workers in many types of employment remains essentially unchanged. Thus, unemployment and partial employment should continue at present, or even higher, levels unless 1) major new industries are developed 2) existing industries are expanded significantly 3) the average work week is reduced substantially 4) retirement at an earlier age becomes more widespread.

Much of Michigan's population growth in the decade between 1960 and 1970 was concentrated in the metropolitan area surrounding the city of Detroit. Most of the remainder occurred in the counties around the state's other major cities (Flint, Grand Rapids, Kalamazoo, Lansing). All of these experienced significant net in-migration as well as an excess of births over deaths. The cities and a majority of Michigan's 83 counties had a large scale net out-migration during this period. In some cases, the 1970 census reported a population count lower than 1960. In others, a small population gain resulted from an excess of births over deaths larger than the migration loss.

Should present patterns of intrastate population movement continue, zero population growth would have a most profound effect on the state's cities and non-metropolitan areas. These, in particular, should anticipate a rapid aging of the population, a rapid decrease in births and concomitant increase in deaths, and an accelerating population loss. In the 19 suburban counties changes would probably be much more gradual. Since there is little out-migration and in-migration is mainly in the younger age groups, these areas can expect that the population age composition will change minimally for some time, birth and death rates will remain near present levels, and the population will continue to increase. The 1970 census reported that, for the first time, a majority (51.3 percent) of Michigan residents lived in the areas surrounding the state's major cities. This trend, particularly under age 45, should accelerate in coming years. By 2030, with ZPG, three-fourths or more of the state population will reside in these counties.

A second factor to be considered is the stated assumption that age-specific mortality rates would remain at present levels. We do not, of course, know whether or not this will be correct. President Nixon has recently proposed a greatly expanded program to find a cure for cancer. This, by itself, would increase average life expectancy about five years. Similar efforts are under way regarding other chronic illnesses. Should these be successful, we would then experience 1) a more rapid aging of the population 2) an average annual population increase greater than the 0.5 percent estimated with ZPG 3) an extension of the period required to achieve population stability (a balance between births and deaths).

The final focus in a discussion of zero population growth should be on the reality of this concept. As mentioned in the introduction, this would require a reduction of about 20 percent in the number of births. While an annual decrease of 30,000 births to Michigan women would appear to involve a mammoth endeavor, it is actually quite readily attainable. As shown in **Table 3**, fertility rates for the United States decreased by nearly one-third between 1960 and 1968. Although this decline did not continue in 1969 and 1970, preliminary data for 1971 indicate a resumption of this trend with fertility rates which are probably at the lowest level in our country's history. In Michigan, as in the rest of the United States, the number of births in 1971 was lower than in 1970 despite an increase in the number of women in the child bearing ages. While final data are not as yet available, we estimate that there were 165,000 live births to Michigan mothers last year, or about 5,000 less than in 1970. This decline was quite unexpected since most demographers had assumed that the rising proportion of females in this age range would result in an increasing number of births and a rising birth rate.

A number of studies in previous years have shown that although desired family size in general did not differ greatly among women of different socio-economic, ethnic and racial backgrounds actual family size did differ quite significantly. The ready availability of the pill, other devices and methods of birth control is enabling an increasing number of women to limit the size of their families to the levels they wish to have. One indication of this has been the sharp drop in births of higher order (fourth or more) and to women in the older ages. Anticipated expansion of family planning services throughout Michigan should therefore lead to further reduction in fertility rates. Japan and a number of countries in northern, central and eastern Europe have achieved, or are near, zero population growth. Given the above, there is a distinct possibility that this will also be reached in Michigan, as in the rest of the United States, within a few years.

MICHIGAN
DEPARTMENT
OF PUBLIC
HEALTH

Monthly Surveillance Report

Cases of Certain Diseases Reported To the Michigan Department of Public Health

For the Five-Week Period Ending March 31, 1972

	1972 This 5-Week Period	1971 Same 5-Week Period	1972 Total To Above Date	1971 Total Same Date	Total Cases for 1971
Rubella	347	470	583	902	2,955
Congenital Rubella Syndrome	0	1	0	1	1
Measles	382	246	710	375	2,659
Whooping Cough	14	11	35	27	140
Diphtheria	0	0	0	0	1
Mumps	608	2,457	1,301	4,856	10,748
Scarlet Fever & Strep Sore Throat	1,747	1,965	4,286	4,654	11,244
Tetanus	0	0	0	0	7
Poliomyelitis (paralytic)	0	0	0	0	0
Hepatitis	483	552	1,253	1,363	4,828
Salmonellosis (other than S. typhi)	66	51	173	153	691
Typhoid Fever (S. typhi)	0	0	1	1	10
Shigellosis	41	18	135	57	295
Aseptic Meningitis	11	9	20	29	239
Encephalitis	4	8	20	32	108
Meningococcic Meningitis	6	14	15	25	64
H. Influenza Meningitis	11	6	20	20	82
Tuberculosis	195	222	439	462	1,824
Syphilis	491	357	1,302	990	4,689
Gonorrhea	2,157	1,759	5,399	4,750	22,115

Information can be supplied by the local health department on the local incidence of disease.

Maurice Reizen, M.D., Director
Michigan Department of Public Health

A new look at the turtle problem

Editor's Note: At the present time there are legislative efforts being promulgated to control the sale of turtles as pets. The following article is a study sponsored by Life Science, Inc., 794 Woodward Ave., Birmingham, Mich. This organization is a group of scientists formed in 1971, to provide a multidisciplinary, scientific base for environmental studies. The group includes clinical chemists, microbiologists, a geologist, entymologist, two clinical pathologists, an internist, an ecologist and others.

John W. Moses, MD
Scientific Editor

By Edwin M. Knights, Jr., MD
Dennis Swieczkowski, MSc
Southfield

Salmonellosis remains an endemic health problem in Michigan; in fact, reported cases have increased over the past three years:

1969	539
1970	665
1971	700

Obviously all cases are not recognized and reported, so that the true incidence must be appreciably higher. In 1971, 87 of the cases were reported from Oakland County.

The role of pet turtles in the epidemiology of human salmonellosis has been recognized for some time.[1-3] The Michigan State Department of Public Health has evidence that at least 31 cases of salmonellosis have apparently been due to these pets.[4] Two states (Washington and Maryland) and one county in Michigan have passed legislation effectively controlling their sale. Maryland's regulation makes it unlawful to sell or offer for sale to the public live turtles without acceptable laboratory proof that such animals are free from salmonella or other contamination that may cause human disease. In a survey conducted recently by the Enteric Diseases Section of the Bacteriology Branch of the Center for Disease Control, 24 of 26 state epidemiologists reported that they believe regulation of the importation, shipment and sale of pet turtles is desirable.[5]

Turtle Food

Although there has been rather extensive documentation of the hazards associated with turtles, relatively little information is available as to the quality of commercially available turtle food.[1] It has been shown that baby turtles are frequently contaminated via the cloaca, but also salmonellae have been found in the meat meal and bone meal used for food on the breeding farms. The authors felt that there was justification for a survey of turtle foods sold to the retail customers to evaluate them as possible sources of infection. As these foods are usually dumped into the aquarium water, there is good opportunity for prolonged incubation of bacteria. The aquarium is usually emptied into the kitchen sink, offering still further possibilities of contamination.

Turtle foods are readily available on the shelves of supermarkets, department stores, discount stores and pet shops. They offer a remarkable degree of variety designed to tempt the palate of the most discriminating terrapin:

Brand:	**Contents:** (as listed by manufacturers)
1	Corn meal, fly larvae, wheat middlings, beef liver, soybean meal, fish meal, meat meal, calcite, alfalfa meal, animal fat preserved with BHT.
2	Dried flies.
3	Dried whole flies, meat meal, menhaden fish meal, 1% precipitated calcium phosphate, oat and soy flour.
4	Corn meal, wheat middlings, fly larvae, soybean meal, fish meal, meat meal, calcite, alfalfa meal, animal fat preserved with BHT.
5	Corn meal, fly larvae, wheat middlings, beef liver, soybean meal, fish meal, meat meal, calcite, alfalfa meal, animal fat preserved with BHT.
6	Animal liver meal, menhaden, fish meal, mosquito larvae, lettuce powder, bone

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Doctor Knights is Director of Laboratories, Providence Hospital, Southfield and Dennis Swieczkowski is Microbiologist, Northland-Oakland Medical Laboratories, P.C., Southfield.

phosphate, dicalcium phosphate, soy lecithin, ferrous sulfate exsiccated, irradiated dried yeast, cod liver oil.

7 Dried ant eggs.

8 Animal liver meal, menhaden, fish meal, dried whole flies, lettuce powder, bone phosphate, dicalcium phosphate, soya lecithin, ferrous sulfate exsiccated, irradiated yeast.

9 Same as #5.

10 Dried whole shrimp.

Of the brands studied, only one appeared to include a lot number identification which might permit prompt removal of contaminated lots from the retailers' shelves.

Methodology

Twenty-four packages of turtle food were purchased at random over a 30-day period from regionally located retail outlets; these included 10 different brand names but were actually processed by four companies.

Approximately one gram of each turtle food was added to a tube of Gram Negative Broth (BBL), mixed well, and incubated in a 5 per cent carbon dioxide atmosphere at 36°C. After 18 hours incubation, one loopful of each GN broth was streaked on to each of the following: Salmonella-Shigella, XLD and MacConkey's agar plates. The plates were then incubated as described above. Suspicious colonies from each agar plate (as described in the BBL manual for each medium) were selected and inoculated into r/b media (Diagnostic Research, Inc., Roslyn, N.Y.). After incubation, those cultures yielding reactions indicative of salmonella were typed with polyvalent antisera, and if found positive, were also typed with salmonella grouping antisera (Lederle). Bacterial cultures thus identified as salmonella were sent to the Michigan Department of Public Health laboratories for speciation.

Results

Ten of the turtle food samples were found to contain numerous coliform organisms (Enterobacter); each of these products were ones containing meat and fish meal. Three of the specimens contained rare Pseudomonas organisms. One sample was found to contain numerous salmonella, group E (Lexington).

Comment

Even from this limited survey it is apparent that turtle foods, as well as the turtles, offer an excellent vehicle for the potential spread of disease. The validity of a laboratory report certifying a "clean bill of health" for a turtle on the basis of a single laboratory examination must also be questioned. The situation is analagous to that of the licensed prostitute with her health card; we must consider the possibilities of reinfection.

The habits of turtles, plus their environment in captivity, predispose to such reinfection. Birdsey and Lynch report that both Testudo graeca and T. hermanni, sold as household pets, are coprophagic. Wild T. hermanni were observed chewing horse dung, and in captivity they will eat human, bovine, or their own feces with avidity even when fresh lettuce leaves are available.[6] In view of this evidence one cannot help but wonder if the gourmet turtle concoctions are not more impressive to the turtle owner than to the pets. We are forced to the conclusion that both humans and turtles need protection from some of the commercial turtle foods.

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Perinatal Tips

By Paul M. Zavell, MD
Detroit

The following case from the files of the Wayne County Medical Society Perinatal Mortality Committee is presented as an aid in continuing education.

Maternal

This was the first pregnancy for this 17-year-old O+, white, unmarried clinic patient.

She had had no prenatal care prior to the sixth month of pregnancy. At this time she had both a sore throat and noted the onset of a thick yellow vaginal discharge.

When seen her throat was injected but she was afebrile and the rest of the physical exam was normal except for the pregnancy and a small amount of vaginal discharge. Her white blood count was 10,200 and a vaginal smear failed to reveal any organisms. Because she was a clinic patient and had received no prior prenatal care she was given a shot of 1,200,000 units of all purpose Bicillin IM and started on Oral Triple Sulfa 500 mgm q.i.d.

Following this visit she failed to return for any more prenatal care.

At about 38 weeks of pregnancy she reappeared in the emergency room in active labor of about 14 hours duration with labor pains three to five minutes apart. It was learned her membranes had ruptured "hours before" she started in active labor and that she had felt sick for several days with a "cold" (low grade fever, cough and stuffy nose). Studies done upon admission were as follows:

(1) VDRL was non-reactive

(2) CBS: Hgb = 9.8 gm WBC = 4500 PMN = 70 Bd = 04, Lymph = 26

(3) Urine: S.G. = 1,020, Albumin, Sugar, Acetone and Microscopic all negative.

Four hours after admission she delivered her daughter. Her "estimated" weight gain was 10 pounds during pregnancy and she had a blood pressure of 130/86.

Following delivery a throat culture revealed H Influenza and she was treated with Ampicillin 250 mgm q.i.d. This with bed rest resulted in a "cure" of her cold. She was discharged home on Feosol Tablets.

Fetal

A five-pound, 12-oz. white female was born with Apgar Scoring of 10 at both one and five minutes.

The initial physical exam was entirely normal but because of the mother's OB history the infant was placed in a "suspect" nursery and observed for 24 hours. No symptoms developed except the beginning of slight jaundice at about 24 hours which worsened in the next 24 hours. She was transferred to the regular nursery at the end of 24 hours of age.

By 48 hours of age it was felt the jaundice was on an A-O basis since cord blood was A+. She was placed under the Bilirubin light. Bilirubin at 24 hours was 7.0 mgm % indirect and 0.5 mgm % direct and at 48 hours was 14.5 mgm % with 1.0 mgm % direct.

On the third day of life with the jaundice worsening it was also noted that the infant had a rectal temperature of 97° (despite being under the Bilirubin light) and she began to "spit-up" occasionally.

The pediatrician on call for staff pediatrics examined the patient and found little to alarm him. However, he alerted the blood bank that he

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Doctor Zavell is chairman, Neo-Natal and Hospital Care Committee, Michigan Chapter, A.A.P., and Chairman, Paranatal Mortality Study Committee, Wayne County Medical Society.

might need O Negative blood of low titer if the Bilirubin went any higher.

About six hours later he was called because the infant seemed a little more irritable and was sucking poorly. He ordered the blood from the blood bank and told the nursery to call him when it was ready. Three hours later the infant's blood was not ready but the infant had a "prolonged" convulsion and "arching" was noted. The pediatrician came in to see the infant but before he came the infant had two more "prolonged" convulsions and expired.

A post-mortem was done revealing E-Coli Sepsis with positive blood and C.S.F. cultures and signs of infection in C.N.S. (Meninges with some PMN's and Exudate) and in the lungs (bilateral Bronchopneumonia).

Perinatal Committee Comments

1. The committee felt both a culture and VDRL should have been done when the mother was seen in the sixth month of pregnancy.

2. Penicillin –G is still preferable (but Ampicillin is acceptable) in Gonococcal V.D. However, failure or recurrence rates have risen in recent years. The committee feels this is due to inadequate amounts being used and recommends two to four million units (or more). No rationale for the use of Triple Sulfa could be seen here.

3. On initial contact with an indigent pregnant patient where it is doubtful prenatal care will be continued, it is felt wise to assign a public health nurse to visit and follow the patient.

4. In a case such as this with evident infection in the mother and jaundice in the first 24 to 48 hours of life one should be alerted to possible infection in the infant and antibiotics should be started.

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This is the month that Michigan's citizens take an appreciative look around them and celebrate their state. Their celebration hits a high during Michigan Week (May 20-27 this year). Three of Michigan's greatest assets are her medical schools, and so, this May, MICHIGAN MEDICINE presents the following articles by the deans of those schools, who express their hopes and aspirations for their schools.

University of Michigan:

Meeting the challenges of research, basic health care and specialized training

By John A. Gronvall, MD
Dean, U-M Medical School
Director, University Medical Center

The unique mission of a medical school is to educate and prepare students for the career of physician. In the special instance of the University of Michigan Medical Center, consisting as it does not only of a medical school but also of the University Hospital and the School of Nursing, this mission is broader and deeper. It includes, in addition to satisfying certain academic and clinical requirements for the practice of medicine, the training of supporting health personnel, the investigation of biomedical problems, and the care of patients. Ultimately an institution such as ours addresses its total resources to maintaining health as a primary human value and the indispensable basis for the enjoyment of all other human values.

As the product of another medical school and as a relative newcomer to the Michigan scene, I can bear relatively unbiased witness to the way in which, historically, the University of Michigan has carried out its mission.

Examples of excellence can be found in virtually all of the biomedical specialties, literally from anatomy to zoology, from the laboratory to the clinic, and from the classroom to the patient care unit. From the U-M Medical School faculty have come textbooks used by faculties of other medical schools. From the U-M Medical School faculty have come the department chairmen, deans, and executive officers of other universities and colleges. And from the U-M Medical School have come techniques, program models, and scientific discoveries which have had immeasurable impact on the health of people throughout the world. Basic pioneering work on steroids, enzymes, tissue rejection, genetics, nuclear diagnostics, virology, reproductive biology and a host of other endeavors continue to carry the UM reputation for excellence.

In the clinical field one need only recall the past 30 to 40 years to find the names of doctors who contributed to this reputation: Alexander, Badgley, Coller, Curtis, Furstenberg, Hodges, Kahn, Miller, Nesbit, Peet, Sturgis, Weller, and Wilson. It would be difficult to find a more formidable list of teachers than these in the history and the halls of many institutions.

Behind the great names are pioneering programs. Perhaps one of the most far-reaching of these in the lives of many Michigan physicians is the postgraduate medicine program developed under the leadership of Doctors John Sheldon and Harry A. Towsley. Beginning in 1927 as the first statewide program in the country in continuing medical education, the U-M postgraduate program today conducts sessions at 15 established centers, is affiliated with 13 Michigan hospitals, and enrolls upwards of 1,500 Michigan physicians annually in its intramural medical courses. In the U-M postgraduate model are to be found the antecedents of affiliations and regionalization. The current coronary care program carried out in 10 Michigan community hospitals and underwritten by the Kellogg Foundation is but a single example of how smaller community hospitals participate in the technical resources of a medical center.

Dean Gronvall

The past 30 years

An historic survey of the U-M Medical Center for the past 30 years is impressive, indeed:

. . . In 1940-41, research funds, both private and federal, amounted to no more than $137,000 per year. Within 15 years this sum grew to more than $12 million.

. . . The total square footage of buildings for medical education, research and patient care programs increased from 950,000 to 2,409,632 sq. ft. Fifteen new buildings have been constructed and occupied during this period.

. . . Three new departments were created: physical medicine, anesthesiology and human genetics. Four new institutes have been established: the Mental Health Research Institute, the Buhl Center for Human Genetics Research, and the Upjohn Center for Clinical Pharmacology. The fourth, the James and Lynelle Holden Perinatal Research Laboratories, will soon be occupied.

. . . The total undergraduate student body of the Medical School in 1940-41 was 472 compared with 881 in 1971-72. Three times that number, over 2,700, are taught or trained by medical school faculty when hospital housestaff, graduate dental, pharmacy, nursing and postgraduate students are counted.

. . . Incoming classes of medical students were increased in size from the 1940 number of 120 to 225 at present. The largest class ever to be graduated from the U-M Medical School, 202, received their diplomas in June, 1971. Plans and programs are now being developed to accommodate an entering class of 300, and a new integrated premedical-medical curriculum is about to begin on an experimental basis that will not only broaden the intellectual content of medical students but also enable them to obtain their degrees in five or six years after high school.

. . . The U-M Medical School is said to have graduated more Black physicians than any other American medical schools, excepting Howard and Meharry. The U-M Medical School has already exceeded the 1975 University-at-large Black student enrollment goal.

. . . The size of the medical school faculty has grown from 164 to 578 between 1970-71.

. . . Administratively the Medical Center is served by a Dean-Director, consists of the Medical School, the University Hospital, and the School of Nursing, and is supported by a Board-in-Control now including representatives of the public-at-large. The Center staff also includes a fulltime director of planning, a director of public information, and a soon-to-be-appointed director of development.

Soren Kierkegaard, the Danish philosopher who greatly influenced modern thought, once wrote: "Life must be lived forwards but can only be understood backwards." Annual reports and encyclopedic histories reflect that truth, for they are recitations of the past, which is the whole basis for our understanding, but they are also a foretelling of the future toward which we all look. I did not think it possible to present a prospective picture of the U-M Medical Center without this brief retrospective review. The important questions and issues which face us as a center for medical and health education are critical questions, and their answers are based on certain assumptions, not the least of which is that the U-M medical center should continue to apply its historic standards of excellence to changing health care patterns and to solving dominant health care problems.

There is still a critical shortage of health manpower. There is still inadequate distribution and availability of health services. And there is still inadequate control of the rising cost of these services. These are problems which cannot be swept away by rhetoric, nor for that matter by short-term solutions. They cannot because they speak to the physician as an educated citizen as much as a trained clinician. They challenge the teaching hospital as a community institution as much as a highly specialized clinical resource. And because these problems touch on the very quality of human life, they go beyond the immediate, practical medical solution for a specific disease to our total concept of humanity.

Space does not here permit examination on depth of the presuppositions, assumptions, ideas and concepts which always underlie practical solutions to pressing social problems. But they are there, and examine them we must. I would hope that every physician in Michigan will re-examine his instincts, his motivations and his goals, as we at the University have done each year at our faculty retreats. The day-to-day practice of medicine, not to say its teaching, requires introspection if we are to make meaningful progress in the solution of health care problems. Without this sense of history and tradition a commitment becomes a compulsion, a solution becomes an expediency, and action becomes an end-in-itself. I doubt that ever before has the physician, or the teacher of physicians, faced such a staggering test of statesmanship. Our entire value system is being challenged by the very forces of change which give it meaning.

Combining tradition with innovation

Against this, then, the U-M Medical Center has faced the question of its own future. Rich in history and deep in intellectual content, we are sensitive about these values; we also remain alert to the pressing need for practical solutions to urgent problems.

First, we make the all-inclusive, philosophical assumption that the medical profession is at its roots a learned profession. It makes little sense to prolong human life if, in the end, living it meaningless as it is for so many people. Yet as physicians we are committed to prolonging life; we are equally committed to making life bearable and productive.

This assumption makes the U-M Medical Center more than a doctor factory. It makes it, hopefully, an institution not only of technical learning but a place where learning is respected beyond its technical capacity.

The new integrated premedical-medical curriculum is based on dual and sometimes competing assumptions: we plan to train more doctors faster, but by eliminating course duplications and by closer attention to moral, social and attitudinal growth, we hope our physicians who graduate from this program will be better equipped to deal with increasingly complex human problems. The training and production of more paramedical personnel and physician assistants will define even more precisely the physician's judgment; he will need even more to know how to manage and motivate a more complex health care team.

Second, we recognize that during the past 25 years the community hospital has achieved levels of competence thought once only to be possible in a teaching hospital or in a medical center. We like to believe that the U-M Medical School and the University Hospital through its postgraduate program and its affiliations with community hospitals in intern and residency programs contributed to the high level of care now available throughout Michigan. This, however, has been a successfully self-limiting relationship; it has created a new role for the University Hospital, and it appears to be a dual role.

Stretched between teaching extremes

With the emergence of excellent acute care facilities throughout Michigan, the University Hospital will find its teaching obligations stretched between the two exremes of primary and tertiary care. As a teaching institution, it will be able to apply its resources to experimental programs in basic, primary hospital care for a given community on the one hand; and it will also have to continue to provide highly sophisticated, specialized care and training on the other.

The Hospital has renovation and remodeling programs which, costly though they are, will carry it through a very important period of transition. The hospital is rapidly reaching the point-of-no-return in such renovation programs, and because it is obsolete the main unit of the hospital will have to be replaced in order for it to meet its joint responsibilities of community and specialty care. The simple statistical fact that one-third of the people who die do so not because the causes of mysterious diseases are unknown but because they lacked simple, basic, primary care, is enough to support experimentation in the delivery of this care. This the University Hospital expects to do. The simple fact is that equipping a neurosurgical suite costs over a quarter of a million dollars, and staffing and equipping a burn unit run per diem costs upwards of $250 to $300 a day. These facts force regionalization of care and concentration of such resources.

Finally, as a medical center, primarily responsible to the State which supports it, we see a continuing need for attention to basic biomedical problems. In a real sense this is the global mission to which great universities have always been committed. The poliomyelitis vaccine was such a global challenge, and it was met by marshalling all of the many resources of several universities. The epidemiology of high blood pressure and coronary artery disease, the biochemistry of mental and emotional disease, muscle and limb regeneration, the impact of virus on birth defects, the synthesis of enzymes, prostaglandins and many others—these require inter-disciplinary scrutiny that is possible only in a medical center environment. As pressure mounts to divert time and resources to health care delivery problems, it will not be easy financing a better future through basic research.

I believe the obligation for more imaginative teaching, more responsive patient care, and more rewarding research at the University of Michigan Medical Center must and will be met.

Wayne State University:

Medical education in the horse latitudes

By Robert D. Coye, MD
Dean, Wayne State University
School of Medicine

Medical schools during the past 15 years have grown into academic medical centers. This has been a very rapid passage on a steady course with favoring winds of federal funding for research and expansion of facilities, faculty and student enrollment. This wind has now abated; and for most schools, the sails are barely filled. Should we, like the sailor explorers in the southern latitudes becalmed between the southern and northern trade

Dean Coye

winds, lighten ship by throwing our horses overboard and make the most of what little wind there is? Obviously the horses are not needed for sailing, but they are needed for further exploration when a landfall is made. Our "horses" are the traditional academic requirements for admission to and completion of the medical educational program, and the faculty and curriculum that have made the program work. During this lull, we have some time—not much—to reconsider our past and plot what our future course should be. Throwing the horses overboard is one choice, but not the only one.

We are, of course, in these latitudes because of the "health care crisis." The exact dimensions of the crisis are arguable in terms of physician numbers, physician distribution, curricula for health care personnel, systems of delivering health care, health care economics, use of ancillary health personnel, and so on. However, there seems to be little disagreement with the widely held view that there is serious trouble with the provision of health care for all of the citizens of this country. From the public's point of view, medical care is frequently seen as being deficient in the four "A's" of acceptability, accountability, availability and adequacy. The situation is in many ways similar to that which existed in the early 1900's. The Flexner report grew out of a concern that the public's health was not being well served by the then existing trade schools of medicine. The reform suggested by Flexner drove the trade schools out of business and put medical education on a firm scientific base in the universities. This time a variety of forces are bringing us to a long, hard look at how the academic medical centers can best serve the public's health.

Health care answers will determine medical center's form

The basic questions are not too difficult to pose. What does the public sense as the high priority health needs? What will they pay taxes or give gifts to support? What are the needs as seen by the professionals? How can these views be meshed? What then should be the role of the medical center? What kinds of needs are there for what kinds of health professionals, and how many of each should we educate? What is the medical center's role in providing services to individuals, families, and communities? What kinds of research should we be doing, and for what purpose? How can we evaluate how well we are doing these jobs?

The answers to these questions are harder to come by. There is some data, but not nearly enough to make easy and clearly correct decisions. There is, for example, much doubt about how much health care the public is really willing to pay for. Certainly for "access to adequate health care," but what does this mean? Certainly not a board certified plastic surgeon in each hamlet, but is a family physician or a "medex" or a good bus service to the nearest city the answer? There are similar gaps in our knowledge which pertain to answering most of the other questions stated or implied above.

I doubt that we will soon have sufficient data, agreement, or social organization to decide on how we should proceed, but proceed we must. The answer to this dilemma seems to be that we must experiment, set up models, try out a variety of ways of doing these jobs to see which one or ones work best. This state of experimentation or lack of clear and purposeful decision is alarming to many, and quite properly so. Anxiety and tension mount. It is a perfect seedbed for those with instant solutions, divinely revealed truth or very strongly held but vague ideas about the future of medical education and medical care. This suggests that there should be some guidelines for what is permissible and what is not in our experiments.

I suggest one guideline. We should not under any circumstances throw our academic horses overboard. By this, I mean that we must be very careful to preserve the notion that we want better-educated, rather than less well-educated physicians in the future. Reduction of premedical and medical curricular time, pruning out "irrelevance," use of "on-the-job" training rather than academically supervised education in the clinical years are all appealing in ways—mostly because they reduce costs—but are steps in the direction of vocational rather than professional education. Granted, many changes are desirable in methods, content and sequence of teaching, in evaluating students' potential for studying and practicing medicine, and in the postgraduate education of physicians, but the urge to do away with all that cannot be shown by objective testing to be immediately "helpful to the doctor in his regular work" must be resisted. Proficiency testing for doctors is still a very long way from being a reality. A necessary corollary of this argument is that while the education of doctors of medicine is very lengthy and expensive, not all that doctors presently do requires this education. I agree wholeheartedly with the concept of the physician's assistant, who, with less lengthy and less costly education, can work with the physician and extend his capacity.

Dean Coye hopes to test variety of theories & models

Beyond this single constraint, I hope that this medical school will be very actively engaged in testing a wide variety of theories and models of medical education and practice. Being located in the center of a very large urban area with all the problems associated with the inner city right at our doorstep, it is inconceivable that we will not be involved in more outreach medical programs which at the same time provide service to those living in this area, and teach our staff and students how such care can best be given and what kinds of teams of health professionals must be trained to provide it.

With the need for primary care so great, it is clear that we must develop programs of undergraduate and graduate training to do this work. Present plans envisage an ambulatory care facility to be called the University Clinics Building which will provide for these kinds of programs as well as the traditional specialty care of ambulatory patients. These programs obviously extend well beyond the traditional boundaries of the medical school, and require carefully worked out linkages with existing and yet-to-be-developed private health related organizations and institutions of federal, state and local government.

Similarly, as Wayne State has no "university hospital" and will use the ambulatory care clinics as a major base for clinical teaching, very close and effective associations with the Detroit Medical Center hospitals and the Veterans Administration Hospital at Allen Park will be required to provide most of the in-hospital learning experiences for our third-year students. I also hope that hospitals and clinics in the Detroit area and throughout the state will be included in a network system which will provide educational opportunities for medical students and house staff for all of the Michigan medical schools. This will be a new and exciting venture into what in the past has been a "town-gown jungle." We must make the concerns of community hospitals for quality medical care with sound financial base and of private practitioners for continuing participation in all areas of hospital care a real and apparent part of our thinking. They, in turn, must understand our problems and help us to provide the necessary educational environment.

Research and graduate training will continue to be a solid and indispensable part of our overall responsibility. I see very great possibilities for new research programs which gather strength from linkages with other schools of this University and with other institutions such as the Michigan Cancer Society which are not formally a part of the university.

Staggering number of plans in medical school's future

This forecast of the future shows Wayne State with a staggering number of new facilities, programs and agreements among institutions to be planned and developed. The burden, however, will be lessened by attitudes of cooperation resulting from the recognition by those with whom we will be working—whether a community organization, a community hospital or another school of this university—that their goals and ours have many more points of convergence than divergence than ever before.

We will continue to intensify our efforts in the future because we believe that these new and experimental ways of accomplishing our objectives will not only provide a clearer direction for us to take in the future, but will also work toward bringing the University and the community closer together so that our joint efforts magnify our chances to succeed. It is both too late and too wrong to go back to the isolated medical school of the 50's, and certainly too wrong to abandon the academic basis of medical education. It is time, though, to put the academic and the community's interests in good health into an appropriate harness where both can pull together. Wayne State University School of Medicine will be on this track.

MSU College of Human Medicine:

Committed to helping Michigan's citizens

By Andrew D. Hunt, Jr., MD
Dean, Michigan State University
College of Human Medicine

It is now five and a half years since our first class of 26 students was admitted. We were then a "two-year medical school," and two classes were transferred to other medical schools to complete their preparation for the M.D. degree. In general those students did very well in the schools to which they were transferred, and a considerable number have returned to Michigan for internships or residencies, and soon will be part of the Michigan medical community.

In July, 1970, the Governor's recommendation that we be financed for a complete four-year school was approved by the Michigan legislature, and the class entering its second year became the first to obtain the Doctor of Medicine degree from Michigan State University. This group of 32 students will, in fact, be graduating in the June 1972 Commencement, and a new era in medical education in Michigan will definitely have been established.

This, then, provides an opportunity to review and analyze past history and make some hazardous predictions into the future.

Original idea to utilize existing departments

The initial plan for a medical school was that it be integrated within the fabric of the university,

Dean Hunt

utilizing the basic science departments already in existence and serving the College of Veterinary Medicine and the undergraduate and graduate programs in the College of Natural Science. To this original concept was added the recognition of the essential nature of the behavioral and social sciences to medical education, and the Departments of Sociology, Anthropology and Psychology, previously administered only by the College of Social Science, were added to the administrative structure of the College of Human Medicine.

This basic idea; namely of utilizing the all-university biological and behavioral science departments within the College of Human Medicine, innovative as it was, has stood the test of time and, in general, is working very well. The departments have been strengthened and augmented appropriately, and have adapted well to the demanding requirements of a modern curriculum for medical education.

To this basic structure, in order of establishment, have been added the following administrative entities: The Office of Medical Education Research and Development, the Department of Medicine, the Department of Psychiatry, the Department of Human Development (pediatrics), the Department of Surgery, the Office of Health Services Education and Research, and the Department of Obstetrics, Gynecology and Reproductive Biology.

The faculty which has been recruited is of a high degree of excellence, and is both productive in basic and clinical research and extraordinarily interested in and dedicated to the improvement of medical education. The curriculum, therefore, has been a constantly changing one.

Sparing the reader the technical details of that for which we are striving, suffice it to say that the curricular goals and objectives include the following:

1. Emphasis on the student's responsibility for learning so that he be prepared to be a continual self-learner throughout his career.

2. Establishment of problem-solving as a fundamental method by which learning is achieved, wherever appropriate, in favor of the more usual didactic presentation and memorizing method.

3. Study and ultimate understanding of human development from fertilization of the ovum through senescence and death as a fundamental basic orientation for medical education.

4. Strong emphasis on the doctor-patient relationship and professionalization of the student, with recognition that the establishment and maintenance of an appropriate therapeutic relationship with the patient is perhaps the major and most important task of the physician.

5. Flexibility through the introduction of self-instructional media and provision of numerous options by which students can achieve the M.D. degree, so that the time required to graduate may vary from three years or less to four years or more, according to the abilities, desires, or propensities of the students themselves.

New curriculum planned for '72

Next fall, an essentially new curriculum will be instituted which, with new advising techniques, evaluation methods, and elective arrangements should have the effect of bringing such goals and objectives closer to reality.

Since it is incumbent upon us to do all we can to provide Michigan with as many physicians who will practice in areas of need as possible, it was, from the beginning, decided that a major part of our students' clinical experience would occur in community settings where they would learn at first hand real life problems of medical care where they really happen, and, perhaps, be attracted eventually to opt in favor of a practicing career either in communities in which part of their training was obtained, or in similar ones.

Thus, for the past several years we have been developing relationships with hospitals in such communities as Lansing, Howell, Alma, Jackson, Grand Rapids, Flint, Kalamazoo, Saginaw, and the Detroit area so that students may obtain appropriately graduated clinical experiences ranging from so-called primary clerkships starting in the second or third year of medical education to more sophisticated clinical hospital experiences appropriate for senior students. Cooperation of community-based physicians, hospital staffs, hospital administrators, and boards of trustees in the development of various arrangements to implement our goals and objectives has been truly extraordinary, and we appear successfully to be demonstrating how it is not only possible, but even desirable to operate a program in medical education in hospitals neither controlled nor owned by the medical school.

By way of physical facilities, we have operated until this year in improvised and renovated quarters which, while serving with a considerable degree of adequacy, have imposed much inconvenience on faculty and students alike. The opening of Life Sciences I in September of 1971, housing the Departments of Medicine, Human Development, and Pharmacology, the Office of Student Affairs, the Human Biology Laboratories, the Medical Media Center, the Dean of Veterinary Medicine, and television studios, as well as classroom facilities, has improved this situation enormously. Fine teaching, research, and faculty office space are provided. Since the School of Nursing also occupies this building, collaborative relationships between medicine and nursing have been developing in a very gratifying fashion.

The next building, currently in the active phase of planning, will include laboratory and office space for departments such as Surgery, Obstetrics and Gynecology, Anesthesiology, and Radiology, expanded animal facilities, and an ambulatory care facility designed for teaching and patient care at both the primary and referral levels. Planning for this phase of the building is being jointly undertaken with the College of Osteopathic Medicine, and the ambulatory program will serve both colleges as well as the needs of those providing medical care for the student body.

A university such as Michigan State is particularly committed to using its resources to assist the people of the state in achieving their goals concerning the quality of their lives. It does so largely through education and by adapting education programs to the people's needs, but also through service and research.

A medical school within such a university, likewise, must be committed to using its resources to assist the people of the state in whatever ways are appropriate, to achieve their goals in the field of health.

The most frequently and loudly expressed need by the people of the state currently is for increased availability of primary medical care. Solving of this problem involves not only the production of increased manpower, but also devising a selection process in an educational program for medical students whose outcome will insure a high percent entering the field of primary care in needy communities. Furthermore, there must also be extensive research and demonstration leading to new ways to provide health care to areas not readily served through the normal route of physicians in the practice of medicine.

So far as numbers are concerned, we are committed to admitting a class of 100 students two or three years hence. The current first year class of 85, an increase of 40 over the previous year, represented an enormous expansion of class size which has put serious strains on students, faculty, and supporting community resources alike, and it is imperative that we be permitted to adjust to a steady state of approximately 100 students per class for at least a few years. Indeed, the accrediting team was quite specific in December, 1971 on this point; namely that while recommending essentially full accreditation, this accreditation is, in fact, linked to a limitation of enrollment at this level.

Family medicine underlies program

The issue of family medicine in medical schools is one of great importance today. The emphasis of our curriculum on doctor-patient interactions, human growth and development, community clinical experiences, and broadly based problem solving exercises has been described. Family medicine, then, underlies our entire educational program. The Admissions Committee deliberately makes an effort to select students who appear to have primary family medicine as a career goal, and there is an effort towards student advising and counseling to nurture such students while they are with us.

We have strongly encouraged development of residency programs in family practice in Lansing and other communities and have done what we have been asked to do in assisting them in their operation. Several new family practice residencies have been established and others are in various stages of planning. Much-needed opportunities for graduate training in the new specialty of family practice are therefore becoming increasingly available, and with definitely increasing numbers of well-qualified applicants.

Our college is currently developing an application for federal funding for a state-wide preceptorship program in family practice, which will be mediated through a consortium to include the medical schools of Wayne State University and the University of Michigan. At present, it appears that the University of Michigan will be the delegate agency, and that Michigan State would have responsibility for the evaluation phases of the program. A formalized student experience in the field of family medicine may therefore come to pass and be available to all medical students in Michigan.

The College of Osteopathic Medicine at Michigan State has established a Department of Family Medicine and an appropriate faculty committee of the College of Human Medicine is in the process of studying ways in which family medicine might be administratively organized within the college and how it might relate to the Department in the College of Osteopathic Medicine.

One can predict with confidence a steady increase in involvement at all levels in the college, not only in the education of increased numbers of family physicians, but also in the promotion and development of this new specialty and its academic base.

Finally, our new Office of Health Services Education and Research, established in July 1971, is steadily developing its role as an agency to assist the state in resolving some of its problems in provision of health care, especially in rural areas.

An overview

In summary, then, as I complete my eighth year as dean of this new college, I am well satisfied with progress that has been made. We have recruited a superb faculty whose dedication to teaching and meeting the needs of this state led to an effort which is truly unique in its intensity and effectiveness in spite of often inadequate and makeshift facilities and periods of stress and uncertainty. Our first two classes of students, who transferred elsewhere to complete their medical education while we were a "two-year" school, have done very well and testify to our early adequacy. There is every reason to believe that our first MD graduates in June 1972, will inaugurate a tradition of graduates of this college achieving excellence not only as members of their profession but also as effective and influential members of society.

Throughout this developmental period, relationships with the Michigan State Medical Society have been extremely cordial, and the help given us by the staff, The Council, resolutions from the House and Delegates, and in countless other ways are most appreciated and it is a great pleasure to have this opportunity to express my personal thanks.

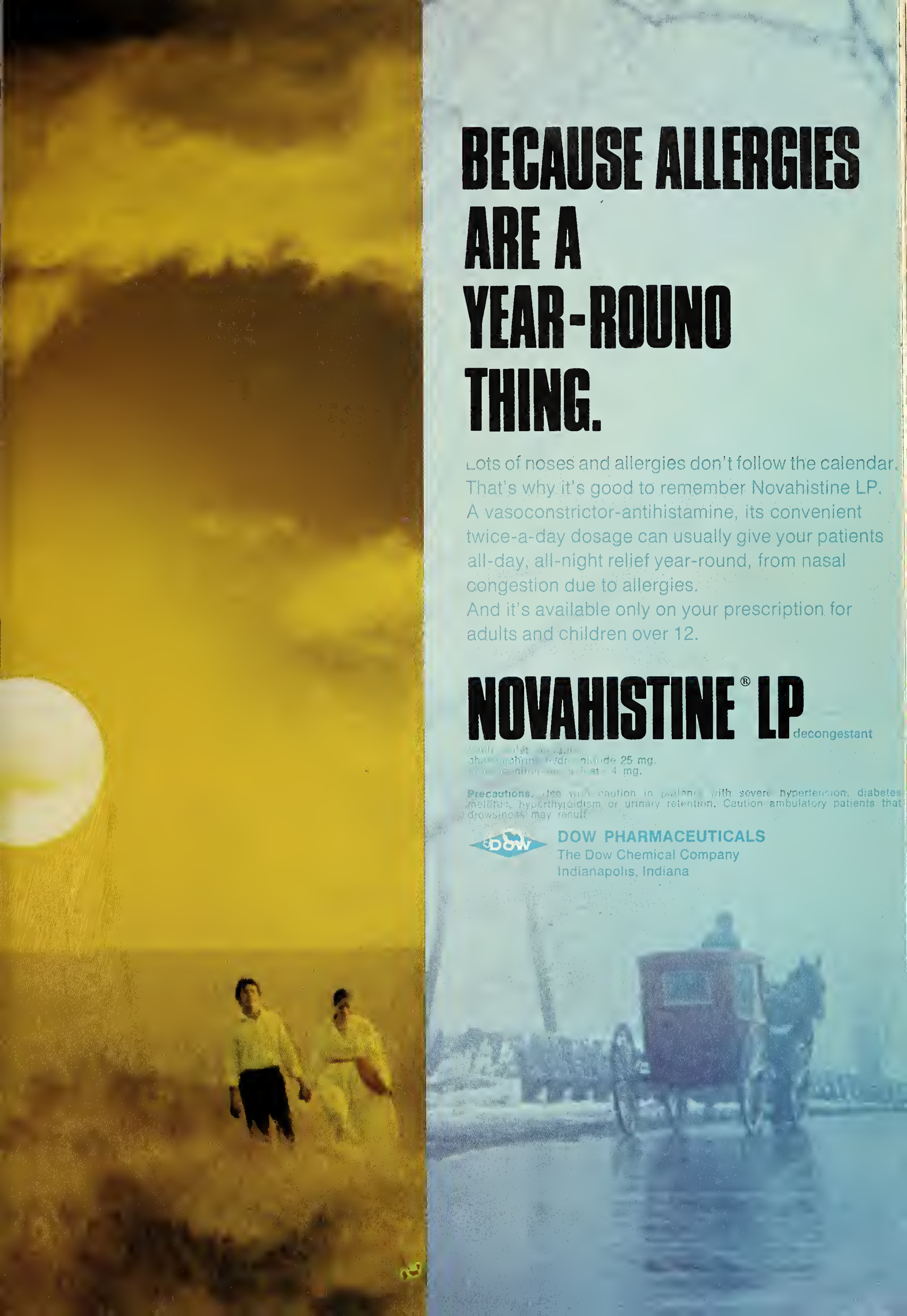
The chairman of the outstate caucus of the MSMS House of Delegates, Edward E. Elder, Jr., MD, Pontiac, waves for recognition from the floor during the first-ever House of Delegates spring meeting March 19-20 in Detroit.

The MSMS staff members at the spring House of Delegates meeting, including Mrs. Vada Davis, assistant to Director Warren F. Tryloff, did yeoman's work. Mrs. Davis above cuts a stencil for one of the reference committee reports which totaled 42 pages. Reference Committee A, which debated the Michigan Medical Programs, Inc., foundation, submitted a report of 26 pages, the longest in the memory of MSMS staff.

MSMS delegates meet in the spring

In major action at the 1972 Spring House of Delegates meeting, the MSMS delegates approved a foundation for peer review and accepted the Relative Value Study Committee report for 1971, without approval of the Michigan Society of Internal Medicine. Debate waxed long and hard during the two-day meeting, with one evening session lasting until 4 a.m.

The eighth draft of the articles of incorporation and bylaws for a foundation, Michigan Medical Programs, Inc., was written by Reference Committee A, headed by Richard J. McMurray, MD, Flint, at the podium above. The foundation is to be established at the state level and to be implemented at the discretion of The MSMS Council.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Precautions: Mild leukopenia has been reported during Flagyl use; total and differential leukocyte counts are recommended before and after treatment with the drug, especially if a second course is necessary. Avoid alcoholic beverages during Flagyl therapy because abdominal cramps, vomiting and flushing may occur. Discontinue Flagyl promptly if abnormal neurologic signs occur. Exacerbation of moniliasis may occur. In amebic liver abscess, aspirate pus during metronidazole therapy.

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For Trichomoniasis. In the Female: One 250-mg. tablet orally three times daily for ten days. Courses may be repeated if required in especially stubborn cases; in such patients an interval of four to six weeks between courses and total and differential leukocyte counts before, during, and after treatment are recommended. Vaginal inserts of 500 mg. are available for use, particularly in stubborn cases. *When the vaginal inserts are used,* one 500-mg. insert is placed high in the vaginal vault each day for ten days and the oral dosage is reduced to two 250-mg. tablets daily during the ten-day course of treatment. Do not use the vaginal inserts as the sole form of therapy. *In the Male:* Prescribe Flagyl only when trichomonads are demonstrated in the urogenital tract, one 250-mg. tablet two times daily for ten days. Flagyl should be taken by both partners over the same ten-day period when it is prescribed for the male in conjunction with the treatment of his female partner.

For Amebiasis. Adults: For acute intestinal amebiasis, 750 mg. orally three times daily for 5 to 10 days. For amebic liver abscess, 500 to 750 mg. orally three times daily for 5 to 10 days.
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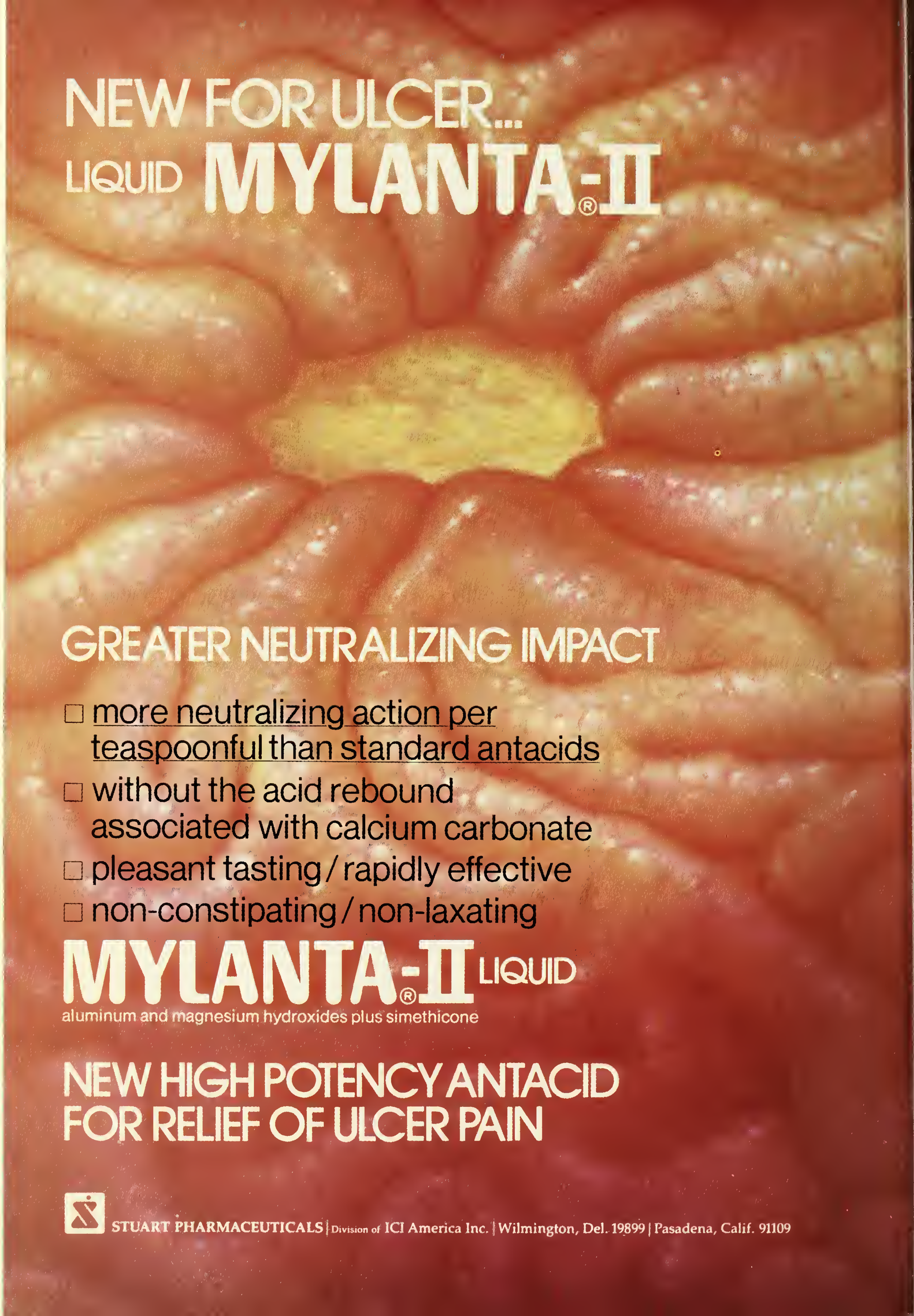

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Michigan mediscene

May 10—Michigan Association for Medical Education, regular membership meeting, 2 p.m., MSMS Headquarters, contact: Roger Carbeck, MD, St. Joseph Mercy Hospital, 326 N. Ingalls, Ann Arbor, 48104

May 10-12—Annual meeting, Michigan Public Health Association, Park Place Motor Inn, Traverse City, contact: Ralph Lewis, Department of Postgraduate Medicine, Towsley Center, The University of Michigan, Ann Arbor, 48104

May 13—Annual May Seminar, "Comparative Pathology," Michigan Society of Pathologists, Hurley Hospital, Flint, contact: Jacob E. Briski, MD, Saint John Hospital, 22101 Moross Road, Detroit, 48236

May 13—17th annual all-day scientific meeting, Michigan Society of Anesthesiologists, Sheraton-Cadillac Hotel, Detroit, contact: Ralph E. Bauer, MD, MSA secretary-treasurer, Henry Ford Hospital, Detroit, 48202

May 18-19—Annual Gull Lake meeting, MSMS Committee on Maternal and Perinatal Health, Kellogg Biological Station, Gull Lake, contact: Helen Schulte, MSMS Headquarters

May 18-19—15th Annual Clinic Days, emphasis "Team Medicine," Children's Hospitals of Michigan and Wayne State University School of Medicine, at the hospital, contact: Larry E. Fleischmann, MD, chairman, 3901 Beaubien, Detroit, 48201

May 19-20—11th annual Kidney Disease Symposium, sponsored by Kidney Foundation of Michigan, at Mercy College Conference Center, Detroit, contact: Sidney Baskin, MD, chairman, 3378 Washtenaw Ave., Ann Arbor, 48104

May 20-27—Michigan Week

May 22-23—National chapter meeting and scientific session, American College of Emergency Physicians, Shanty Creek, Bellaire, contact: Gaius Clark, MD, 865 Pebblebrook Lane, East Lansing, 48823

May 22-23—National Conference on Instrumentation and Hazards in Cardiac Care, Towsley Center, University Medical Center, Ann Arbor, sponsored by Council on Clinical Cardiology of the American Heart Association and the Michigan Heart Association, contact: Harold Arnow, public information director, MHA, P.O. Box L-V 160, Southfield, 48076

May 24—Michigan Hospital Day, sponsored by the University of Michigan Department of Postgraduate Medicine, at Towsley Center, U-M, contact: Joseph H. Owsley, U-M Health Science Information Service, University Hospital, Ann Arbor, 48104.

May 24-26—Annual Medical Staff-Trustee-Administrator Forum, sponsored by Michigan Hospital Association, Boyne Mountain Lodge, Boyne Falls, contact: Frank A. Drazkowski, Administrator, Grand View Hospital, US 2, Ironwood, 49938

May 31-June 3—Continuing Medical Education course on "Treatment of the Seriously Injured or Ill in the Emergency Department," American College of Surgeons Committee on Trauma, in Detroit, contact: Oscar P. Hampton, Jr., MD, Director of Trauma Division, ACS, 55 E. Erie St., Chicago, 60611

June 2-3—Gaylord Trauma Day, Hidden Valley Otsego Ski Club, Gaylord, contact: Benjamin Henig, MD, Keyport Clinic, 308 Michigan Ave., Grayling, 59738

June 5-6—Annual Spring Mental Health Meeting, Kellogg Center, MSU, contact: Bruce Alderman, conference consultant for medical continuing education, Continuing Education Service, MSU, East Lansing, 48823

June 5-7—Initial Management of the Acutely Ill and Injured Patient, Ann Arbor, contact: Charles F. Frey, MD, Department of Surgery, University of Michigan Medical Center, Ann Arbor, 48104

June 7—The Council, MSMS Headquarters, contact: Warren F. Tryloff, Director

June 12-16—Eighth Annual Northern Michigan Summer Program, "Diagnosis and Treatment of Some Common Medical Problems," sponsored by Department of Postgraduate Medical Education, University of Michigan, at Shanty Creek Lodge, Bellaire, contact: Neal A. Vanselow, MD, acting chairman, U-M Department of PG Medicine, Towsley Center, Ann Arbor, 48104

June 18-22—Many Michigan physicians will attend AMA Annual Convention in San Francisco

June 23-24—Annual Meeting, Upper Peninsula Medical Society, Holiday Inn, Marquette, contact: Thomas B. Bolitho, MD, UPMS president, 1414 W. Fair Ave., Marquette, 49855

June 26-29—International Symposium on Clinical Aspects of Metabolic Bone Disease, Henry Ford Hospital, contact: Boy Frame, MD, Henry Ford Hospital, Detroit, 48202

June 26-30—American College of Physicians, Conference on Medical Interviewing, Kellogg Center, MSU, contact: Allen Enelow, MD, chairman, Department of Psychiatry, MSU, East Lansing, 48823

July 15-16—"Summer of '72" seminar weekend for State of Michigan Medical Assistants, Schuss Mountain, Mancelona, contact: Mrs. Audrie Chute, chairman, 3600 W. 13 Mile Road, Royal Oak, 48072

July 15-19—26th Annual Postgraduate Scientific Assembly of Michigan Academy of Family Physicians, Boyne Highlands, Harbor Springs, contact: George Hoekstra, MD, chairman, 100 Maple St., Parchment, 49004

July 27-28—Coller - Penberthy - Thirlby Conference, Park Place Motor Inn, Traverse City, contact: L. P. Skendzel, MD, Traverse City, chairman

September 21-24—Michigan Regional Meeting, American College of Physicians and Michigan Society of Internal Medicine, Otsego Ski Club, Gaylord, contact: Muir Clapper, MD, ACP Governor for Michigan, Wayne State University School of Medicine, 540 E. Canfield, Detroit, 48201

Oct. 1 and 4—The Council, Sheraton-Cadillac Hotel, Detroit, contact: Warren F. Tryloff, Director

Oct. 1-5—107th Annual Session of the Michigan State Medical Society, Sheraton-Cadillac Hotel, Detroit, contact: Richard Campau, MSMS Headquarters, Box 950, East Lansing, 48823

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T_3 (Resin)	Less than 25%	27-35%
T_3 (Red Cell)	Less than 11%	11.5-18%
Free Thyroxine	Less than 0.7 nanograms %	0.7-2.5 nanograms %
Murphy-Pattee	Less than 2.9 mcg %	4-11 mcg %

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1. Latiolais, C. J., and Berry, C. C.: Misuse of Prescription Medications by Outpatients, *Drug Intelligence & Clin. Pharm.* 3:270-7, 1969.
2. Braverman, L. E., Ingbar, S. H., and Sterling, K.: Conversion of Thyroxine (T4) to Triiodothyronine (T3) in Athyreotic Human Subjects, *J. Clin. Invest.* 49:855-64, 1970.
3. American Druggist BLUEBOOK, March, 1971.

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Indications: SYNTHROID (sodium levothyroxine) is specific replacement therapy for diminished or absen thyroid function resulting from primary or secondar atrophy of the gland, congenital defect, surgery, excessive radiation, or antithyroid drugs. Indications fo SYNTHROID (sodium levothyroxine) **Tablets** include myxedema, hypothyroidism without myxedema, hypothyroidism in pregnancy, pediatric and geriatric hypothyroidism, hypopituitary hypothyroidism, simple (nontoxic) goiter, and reproductive disorders associated with hypothyroidism. SYNTHROID (sodium levothyroxine) for **Injection** is indicated for intravenous use in myxedematous coma and other thyroid dysfunctions where rapid replacement of the hormone is required. The injection is also indicated for intramuscula use in cases where the oral route is suspect or contraindicated due to existing conditions or to absorption defects, and when a rapid onset of effect is no desired.

Precautions: As with other thyroid preparations, a overdosage may cause diarrhea or cramps, nervousness, tremors, tachycardia, vomiting and continued weight loss. These effects may begin after four or five days or may not become apparent for one to three weeks. Patients receiving the drug should be observed closely for signs of thyrotoxicosis. If indications of overdosage appear, discontinue medication for 2-6 days, then resume at a lower dosage level. In patients with diabetes mellitus, careful observations should be made for changes in insulin or other antidiabetic drug dosage requirements. If hypothyroidism is accompanied by adrenal insufficiency, as Addison's Disease (chronic subcortical insufficiency), Simmonds's Disease (panhypopituitarism) or Cushing's syndrome (hyperadrenalism), these dysfunctions must be corrected prior to and during SYNTHROID (sodium levothyroxine) administration. The drug should be administered with caution to patients with cardiovascular disease; development of chest pains or other aggravations of cardiovascular disease requires a reduction in dosage.

Contraindications: Thyrotoxicosis, acute myocardial infarction. **Side effects:** The effects of SYNTHROID (sodium levothyroxine) therapy are slow in being manifested. Side effects, when they do occur, are secondary to increased rates of body metabolism; sweating, heart palpitations with or without pain, leg cramps, and weight loss. Diarrhea, vomiting, and nervousness have also been observed. Myxedematous patients with heart disease have died from abrupt increases in dosage of thyroid drugs. Careful observation of the patient during the beginning of any thyroid therapy will alert the physician to any untoward effects.

In most cases with side effects, a reduction of dosage followed by a more gradual adjustment upward will result in a more accurate indication of the patient's dosage requirements without the appearance of side effects.

Dosage and Administration: The activity of a 0.1 mg. SYNTHROID (sodium levothyroxine) TABLET is equivalent to approximately one grain thyroid, U.S.P. Administer SYNTHROID tablets as a single daily dose, preferably after breakfast. In hypothyroidism without myxedema, the usual initial adult dose is 0.1 mg. daily, and may be increased by 0.1 mg. every 30 days until proper metabolic balance is attained. Clinical evaluation should be made monthly and PBI measurements about every 90 days. Final maintenance dosage will usually range from 0.2-0.4 mg. daily. In adult myxedema, starting dose should be 0.025 mg. daily. The dose may be increased to 0.05 mg. after two weeks and to 0.1 mg. at the end of a second two weeks. The daily dose may be further increased at two-month intervals by 0.1 mg. until the optimum maintenance dose is reached (0.1-1.0 mg. daily).

Supplied: Tablets: 0.025 mg., 0.05 mg., 0.1 mg., 0.15 mg., 0.2 mg., 0.3 mg., 0.5 mg., scored and color-coded, in bottles of 100, 500, and 1000. Injection: 500 mcg. lyophilized active ingredient and 10 mg. of Mannitol, N.F., in 10 ml. single-dose vial, with 5 ml. vial of Sodium Chloride Injection, U.S.P., as a diluent. SYNTHROID (sodium levothyroxine) for **Injection** may be administered intravenously utilizing 200-400 mcg. of a solution containing 100 mcg. per ml. If significant improvement is not shown the following day, a repeat injection of 100-200 mcg. may be given.

FLINT LABORATORIES
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Highlights of March 19, 1972 meeting — The MSMS Council

(prior to spring house of delegates meeting)

RELATIVE VALUE STUDY—The Council accepted the report of the MSMS Relative Value Study Committee transmitting the schedules for the remaining two sections (ophthalmology and medicine) to the House for approval.

MEDICAID DISCOUNT — The Council deferred action on a possible poll of MSMS members until the next meeting of The Council. The proposal of Governor Milliken that Medicaid payments be discounted by 3% is not part of the budget bill before the state legislature.

MEDICAL ADVISORY COMMITTEE—The Council authorized the nomination of Lionel Swan, MD, Detroit, and Leland E. Holly, II, MD, of Muskegon, to fill the post of Richard Pomeroy, MD, Lansing, one of the MSMS representatives on the Medical Advisory Committee to the Department of Social Services.

JOINT PRACTICES COMMISSION—The Council appointed Ray Helfer, MD, MSU College of Human Medicine; Thomas Setter, MD, Mt. Clemens; Lee B. Stevenson, MD, Detroit, and Louis R. Zako, MD, as members of the proposed joint Practices Commission with the Michigan Nurses Association, similar to one already organized between the two national organizations.

GROUP TRAVEL — The Council authorized a letter to the MSMS membership informing them that MSMS has approved a company offering economy-class travel to European cities. The letter would be especially aimed at younger MSMS members and families of members.

HEALTH CARE PACKAGE—The Council authorized $1,000 for the President's Project to develop a position paper on the scope of benefits in any governmental health care package. Doctor Adler is to review the present medical care facilities, including cost, and present his information to The Council.

EMERGENCY BOOKLET — The Council endorsed preparation of a booklet on emergency medical care which is proposed as a joint venture of the Michigan Hospital Association, Michigan Association of Osteopathic Physicians and Surgeons, and MSMS.

STUDENT PRECEPTORSHIPS — The Council approved in principle a recommendation that MSMS develop a program to place second and third year medical students with family physicians on a non-credit basis to help alleviate the exodus of Michigan medical graduates to other states. The Council authorized the Education Liaison Committee to submit a proposal to the University of Michigan to be included in a Michigan request for federal funds available to universities under the 1972 Health Professions Special Grant for Preceptorship Training.

EMERGENCY PERSONNEL—The Council approved the Legislative Policy Committee's recommended procedure for handling applications to the National Health Services Corps to alleviate critical health manpower shortages. The committee's recommended procedure is designed to give decision-making power to the component medical society and includes six guidelines.

INTERNS', RESIDENTS' INSURANCE—The Council approved extending the MSMS Group Disability Insurance Program to Michigan interns and residents who would become MSMS associate members for a minimal fee.

NO SMOKING—The Council approved a recommendation that MSMS adopt a position on smoking and health that would encourage doctors, physicians' employees and hospital staff members to quit smoking, that MSMS members work to ban the sale of tobacco products in all hospitals and health facilities, and that MSMS lead in publicizing the hazards of smoking.

ENVIRONMENTAL CONFERENCE—The Council authorized a transfer of $1,000 from the budget of the Committee on Postgraduate Medical Education to cover the cost of a MSMS-sponsored international conference next fall for physicians about environmental quality control.

MATERNAL HEALTH—The Council approved a recommendation that MSMS support legislation to appropriate additional funds to the MDPH to expand the Detroit Maternity and Infant Care Project, and to create similar projects in Jackson, Battle Creek, Grand Rapids, Muskegon, Flint and Benton Harbor.

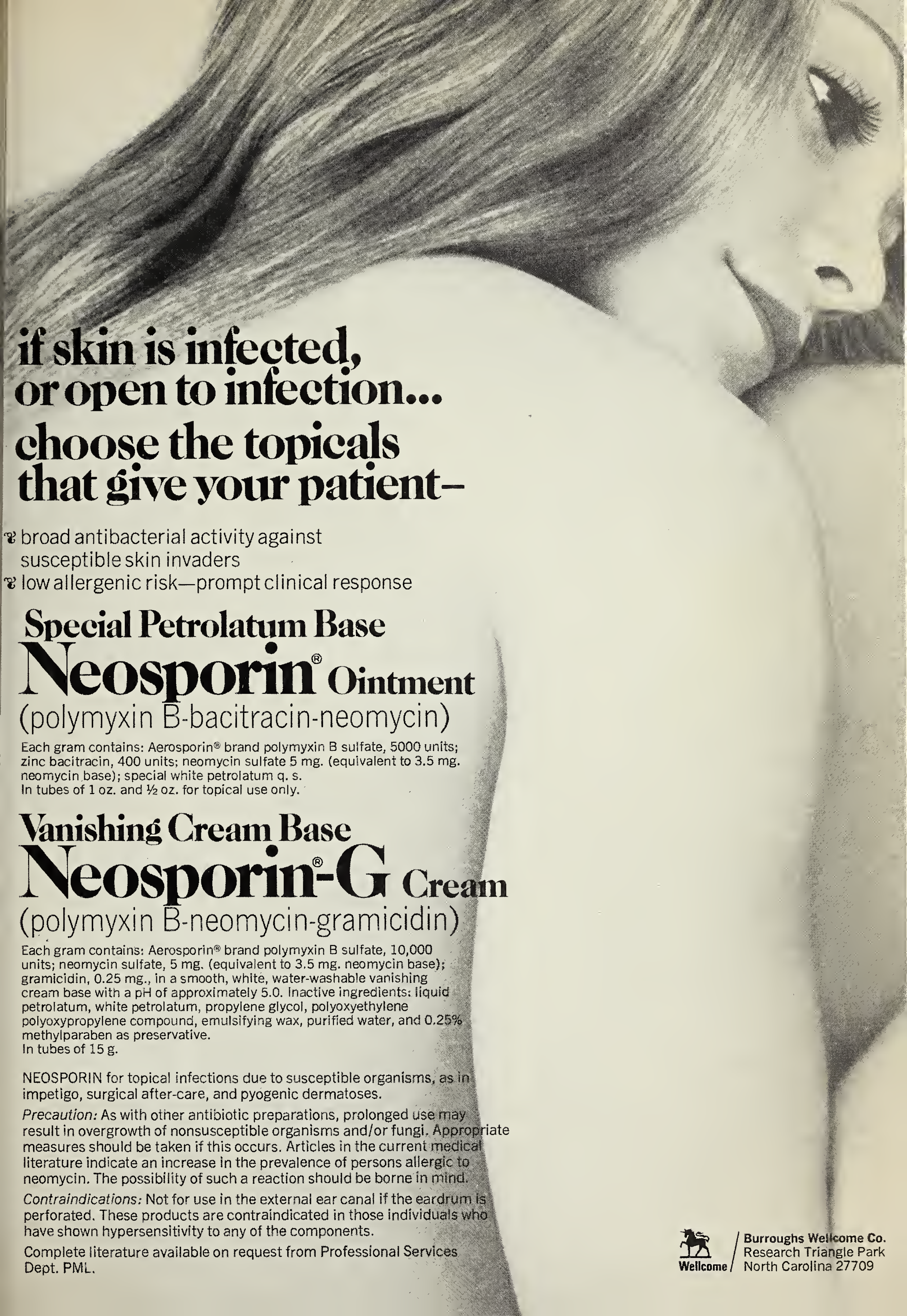
LEGISLATION—The Council did not approve MSMS support of HB 4949 and HB 5574, but did approve MSMS agreement in principle with some of their provisions—that there be some legislated restrictions on hospital expansion and construction; that coverage of existing licensed hospitals should be provided by all corporations who provide health benefits, and that two practicing physicians should be appointed to a Health Facilities Council if it is established.

The Council approved MSMS support of SB 1133, to require certification that turtles sold as pets are free of salmonella bacteria contamination;

The Council approved support of SB 1136 and HB 5883, to repeal the Basic Science Law;

The Council approved MSMS support of SB 1212, to exempt Canadian medical school graduates from the basic science examination;

The Council approved MSMS support of HB 5921 which repeals only the requirement for smallpox vaccination.



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Spring peeper (tree frog, *Hyla crucifer*):
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What to do with multiphasic screening referrals? AMA guidelines give directions

By Donald N. Sweeny, Jr., MD
Chairman, Michigan Delegation to AMA

Physicians engaged in all types of health care—office, school programs, and industrial annual surveys—have emphasized the importance of screening programs in the management of their patients. This emphasis has been greatly intensified over the past few years with the rapid growth in the number of multiphasic health testing programs. Medical societies as well as individual physicians are being called upon, either directly or indirectly, to help plan or participate in these survey procedures. The use of automated as well as non-automated techniques has become one method of initial health care data aquisition.

Disseminating AMA Guidelines

The House of Delegates of the American Medical Association has recently approved a report of its Council on Medical Service concerning this method of collection, recording, and reporting of test results. It seems appropriate that the guidelines developed should be widely disseminated among practicing physicians.

It must be emphasized that multiphasic health testing is only a collecting device and therefore *not a complete health service*. Unfortunately there are misinterpretations of the value of MHT among the laity and it is important that these groups know that to be meaningful such data must have physician interpretation and evaluation. Without this, multiphasic health testing is ineffective. It should also be understood that MHT in no way replaces skilled diagnosis and treatment by the physician although it may serve as a substantial aid to him in the practice of medicine.

The concept of multiphasic health testing is not new to the American health system—such a program was established in the United States as early as 1914. In 1971, however, it is estimated that there were over 140 programs testing more than two million persons.

Doctor Sweeny

Substantial variety exists between the testing routine in the multiphasic health programs in operation throughout this country. There are programs in which the routine is fixed—a standardized battery of tests being offered with no flexibility. There are other plans with a variable routine which selects tests for the individual being tested.

These programs are operated under a variety of agencies—private corporations; labor unions; federal, city, county, and state health departments; individual physicians; group practices; insurance companies; medical societies, and clinical laboratories. Some of these are on a fixed fee and others on a fee-for-service basis.

The cost of these programs varies greatly and is influenced by a number of factors—such as scope of the procedures included in the testing program, the number of persons tested, personnel utilized, sources of the funds, whether or not the MHT unit is operated as a part of another health service program and whether it is operated on a profit or a non-profit basis. Standardized charges range from $2 to $150. There are a number of plans that have variations in their testing routine and these variable fees range from $5 to $225.

Benefits of MHT programs

In assessing the need for and the quality of any medical service, the benefits and limitations of all available patient management techniques should be considered. Alternative methods should also be evaluated.

Where MHT programs *are properly integrated* into the health care system, the following may be listed as benefits: (1) improved quality of records; (2) more efficient use of physicians' time by use of allied health personnel and technical aids; (3) earlier detection of a wider range and greater number of asymptomatic diseases in apparently healthy people; (4) improved opportunity for preventive care through accumulation of baseline health data; (5) possible reduction of overall costs for health care by early detection of disease and decrease in hospitalization; (6) improved health education and patient counseling.

There are, however, many problems associated with multiphasic health testing which must be understood. Some of these limitations are: (1) false positives and false negatives on test results; (2) depersonalization of health care; (3) misconception by some users that MHT is a complete diagnostic procedure that replaces the need for periodic examinations by a physician; (4) many abnormalities appearing in the test results which were known or suspected before; and (5) possible overload on the health delivery system by identification of questionable findings.

Accurate cost benefit analysis has not been possible because of the many and complex variables. Research must be pursued in order to determine properly and accurately the cost in relation to the true yield of the multiple tests in terms of disease processes that can be corrected or interrupted. Such an analysis is necessary to determine the proper role for MHT in positive health maintenance and preventive medicine.

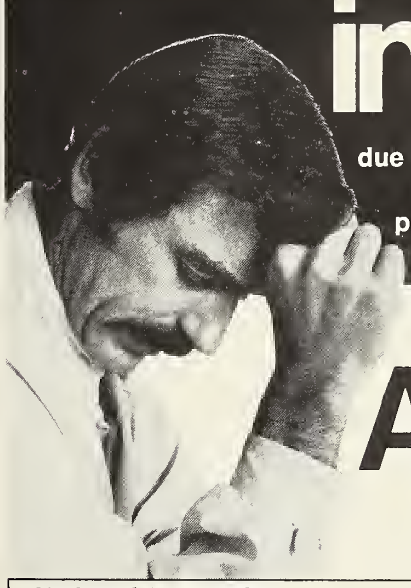
We in private medicine strongly support a pluralistic health care delivery system. The diversity of such a system allows for innovations, competition, incentives for organizational change, and improvement of quality. We support research and demonstration programs and we encourage physicians to exercise medical leadership in planning, developing, and operating multiphasic health testing programs which will meet the needs of the community involved.

As in all endeavors today, there are legal considerations surrounding unsolicited reports. Many programs accept and test persons who have not been referred by a physician. Generally the person tested is asked to designate a physician to whom the report is to be sent. This has resulted in many reports being sent to practicing physicians without any advance notice or arrangement by the persons tested regarding services involved in evaluating and implementing such reports.

By designating a physician to whom his MHT results are to be sent, the individual has requested the performance of professional services by that physician. The extent to which that physician is obligated, if at all, to furnish such services involves legal questions for which neither the courts nor state legislatures thus far have provided answers. There are many humanitarian implications as well.

The following recommendations for handling unsolicited MHT reports have been developed by the House of Delegates of the AMA in consultation with the Office of General Counsel of that organization:

1. A physician who receives reports from a MHT organization involving persons who have made no prior arrangements with him for their evaluation may choose to accept such persons as his patients and communicate with them and provide such additional services as are necessary and usual in the physician-patient relationship.
2. If, however, the physician elects not to accept the patient, he may return the reports to the MHT organization. If he does so, it is recommended that a covering letter be sent stating that he has not evaluated such reports and that the MHT organization must take the necessary steps to inform the persons tested of the need to make arrangements with a physician for their evaluation and follow up care if required.



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The concept of chemotherapy plus the physician's psychological support is confirmed as effective therapy.

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T. Jakobovits
Fertility and Sterility, January 1970
Official Journal of the American Fertility Society

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Double-Blind Study and Type of Patient: 100 patients suffering from impotence. Of the patients receiving the active medication (Android) a favourable response was seen in 78%. This compares with 40% on placebo. Although psychotherapy is indicated in patients suffering from functional impotence the concomitant role of chemotherapy (Android) cannot be disputed.

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Each yellow tablet contains:
Methyl Testosterone ..2.5 mg.
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Dose: 1 tablet 3 times daily.
Available:
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Glutamic Acid ....100 mg.
Pyridoxine HCL ....5 mg.
Niacinamide ....75 mg.
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Vitamin B-12 ....2.5 mcg.
Riboflavin ....5 mg.
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Contraindications: Android is contraindicated in patients with prostatic carcinoma, severe cardiorenal disease and severe persistent hypercalcemia, coronary heart disease and hyperthyroidism. Occasional cases of jaundice with plugging biliary canaliculi have occurred with average doses of Methyl Testosterone. Thyroid is not to be used in heart disease and hypertension.

Warnings: Large dosages may cause anorexia, nausea, vomiting abdominal pain, diarrhea, headache, dizziness, lethargy, paresthesia, skin eruptions, loss of libido in males, dysuria, edema, congestive heart failure and mammary carcinoma in males.

Precautions: If hypothyroidism is accompanied by adrenal insufficiency the latter must be corrected prior to and during thyroid administration.

Adverse Reactions: Since Androgens, in general, tend to promote retention of sodium and water, patients receiving Methyl Testosterone, in particular elderly patients, should be observed for edema.

Hypercalcemia may occur, particularly in immobilized patients: use of Testosterone should be discontinued as soon as hypercalcemia is detected.

References: 1. **Monteseno, P., end Evangelista, I.** Methyltestosterone-thyroid treatment of sexual impotence. Clin Med 12:69, 1966. 2. **Dublin, M. F.** Treatment of impotence with methyltestosterone-thyroid compound. West Med 5:67, 1964. 3. **Titeff, A. S.** Methyltestosterone-thyroid in treating impotence. Gen Prac 25:6, 1962. 4. **Hellman, L., Bradlow, H. L., Zumoff, B., Fukushima, D. K., and Gallagher, T. F.** Thyroid-androgen interrelations and the hypocholesteremic effect of androsterone. J Clin Endocr 19:936, 1959. 5. **Farris, E. J., and Colton, S. W.** Effects of L-thyroxine and liothyronine on spermatogenesis. J Urol 79:863, 1958. 6. **Osol, A., and Farrar, G. E.** United States Dispensatory (ed. 25). Lippincott, Philadelphia, 1955, p. 1432. 7. **Wershub, L. P.** Sexual Impotence in the Male. Thomas, Springfield, Ill., 1959, pp. 79-99.

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3. It is recommended that the physician evaluate any MHT reports involving any patient whom he is actively treating or has treated in the past and that he communicate with that patient. Failure to do so may result in liability for malpractice if as a consequence the patient is not provided with prompt necessary treatment.
4. Even though the person involved is a stranger to the physician, if the testing results for that person indicate an urgent need for medical treatment suggesting a possible emergency situation, it is recommended that the physician communicate directly with the patient wihout delay for humanitarian reasons.

In summary, the House of Delegates of the AMA has adopted (Dec. 1971) the following guidelines for the use of physicians and medical societies in providing technical advice and assistance in planning, development, implementation, and operation of multiphasic health testing programs: *(Report of Council on Medical Service C—Clinical Session 1971)*

AMA Guidelines for multiphasic health testing

1. Multiphasic health testing is a method of acquiring, storing, collating, and reproducing medical data on individual patients. The testing procedures are considered to be incomplete health services. Provisions must be made for a physician to interpret and evaluate this medical data base as an aid in continuing patient care.
2. The multiphasic testing program should meet applicable licensing requirements and be appropriately evaluated for quality control.
3. Physicians should be involved in the planning and development of testing programs, and the operation of all programs should be supervised by qualified physicians.
4. The system should be designed to make maximum use of allied health professionals and should utilize technical and automated techniques where justified.
5. For professional value and economic feasibility, the program should include tests that are simple, safe, easy to interpret, inexpensive and quick to perform, and that have acceptable sensitivity, specificity, high predictive value, and patient acceptance.
6. The testing system should include the following criteria: reliability, accuracy of output, saving of time of physicians and allied health personnel, adequate utilization, and sufficient flexibility for customization to physician and patient needs. The program should establish individual ethnic, geographic, and other variations of normal and abnormal patterns.
7. The program should provide for confidentiality of patient data.
8. The testing program should be used, where feasible, to meet otherwise unmet community health needs and should be integrated into the continuing health care system.
9. The testing program should be designed to meet various objectives such as diagnostic services, health maintenance, and guidance in management of ongoing illness including chronic disease.
10. Evaluation methodology should be built into the program to determine the acceptance and use, yield, false positives and false negatives, as well as the long-term effects of the program on illness and the need and demand for health services. The program should include a documented accounting system, at least for internal use, and a reasonable cost finding system that would allow for cost analysis and cost summaries.
11. The program should maintain freedom of choice for both the physician and the patient.

New Blue Shield Board includes five physicians

Five Michigan physicians are new members of the second Michigan Blue Shield board elected under a restructuring of both the corporate body and board in 1970.

They are William O. Mays, MD, and Louis E. Heideman, MD, Detroit; W. Kaye Locklin, MD, Kalamazoo; George M. Wilson, Jr., MD, Marquette, and Stuart L. Cohn, MD, Alpena.

The five were chosen at the recent annual meeting of the corporate body in Detroit. In addition, eight more physicians were named as new members of the corporate body, to replace those who did not choose to continue as members.

The new corporate body members are William F. Bowden, MD, Marine City; Marion G. McCall, MD, John W. Moses, MD and Robert W. Black, MD, Detroit; Louis R. Zako, MD, Allen Park; Raymond L. Hockstad, MD, Escanaba; William S. Smith, MD, Ann Arbor, and Kenneth J. Ray, MD, Grosse Ile.

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> *"The history of science, and in particular the history of medicine . . . is . . . the history of man's reactions to the truth, the history of the gradual revelation of truth, the history of the gradual liberation of our minds from darkness and prejudice."*
>
> *—George Sarton, from "The History of Medicine Versus the History of Art"*

Should nongovernment scientists and physicians play a role in drug regulation?

Opinion

Results of a questionnaire to 7000 physicians:

82.8%
Physicians should play a role

78.3%
Independent scientists should play a role

69.8%
Medical academicians should play a role

Opinion & Dialogue

Dialog

Should nongovernment scientists and physicians play a role in drug regulation?

Doctor of Medicine

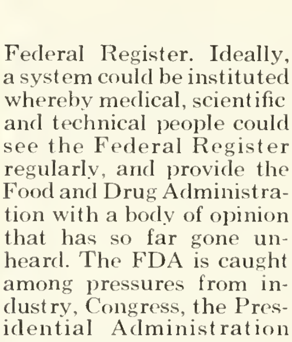
Herbert L. Ley, Jr., M.D., M.P.H., Formerly Commissioner, F.D.A. (1968-1969) Currently Medical Consultant

In order for drug regulation to be effective, participation in the regulatory process from nongovernment physicians and scientists must be encouraged. Without such involvement, there will continue to be a high degree of controversy surrounding any regulations promulgated by the Food and Drug Administration.

There are two areas in which participation and communication by nongovernment physicians and scientists could significantly improve the process of regulation. First, scientists and physicians throughout the country could become involved in consulting relationships with the Food and Drug Administration in important scientific areas while regulatory policies are being evolved. If nongovernment professionals could bring their expertise and experience to bear early in the decision-making process, they would have less reason to criticize the final outcome.

Secondly, practicing physicians, academic physicians, and academic-based scientists could make it their business to comment on proposed regulations appearing in the Federal Register. Ideally, a system could be instituted whereby medical, scientific and technical people could see the Federal Register regularly, and provide the Food and Drug Administration with a body of opinion that has so far gone unheard. The FDA is caught among pressures from industry, Congress, the Presidential Administration and consumers. It should also feel pressures from practicing physicians and scientists.

In order to become more involved in these stages of the drug regulatory process, nongovernment physicians and scientists should begin to exercise their influence through their respective professional organizations, state and national medical societies, and specialty groups. Logically, a letter from these organizations representing a collective opinion has far greater weight in the regulatory process than individual letters. If the Food and Drug Administration receives opinions from these organizations early, before a regulation gets into the Federal Register, they are in a good position to respond with further study and review. Without such dissenting opinions, there is very little incentive to make changes in proposed regulations.



One instance in which practitioners did influence drug regulatory affairs in this way is the recent controversy that arose over the legitimacy of drug combinations. The strong opinion of practitioners on the value of such medication in clinical practice played a very prominent role in making the Food and Drug Administration modify its rather restrictive policy.

Another way in which practitioners can effectively influence drug regulations is by working with drug manufacturers conducting clinical trials of chemotherapeutic agents. When a drug is rated other than effective it may only mean that there is a lack of controlled clinical evidence as to efficacy. Thus, physicians might offer to conduct clinical studies that could help keep a truly effective drug in the marketplace. The treatment of diseases such as diabetes and angina are areas where the practitioner can aid in clinical studies because patients suffering from these diseases are rarely found in the conventional hospital setting.

By working with ethically and scientifically sound study designs in his everyday practice, the practitioner could begin to play an important part in determining official ratings on drug efficacy.

Nongovernment physicians and scientists and the FDA should also improve their lines of communication to the public. The medical community must develop a voice every bit as loud as that of the consumerists, the press, and others who sometimes criticize without complete information. If not, much of what the medical community *and* federal regulators do will often be represented in simplistic and somewhat misleading terms.

One illustration of the misuse of the media in this regard is the recall of anticoagulant drugs several years ago. This FDA action was given publicity by the press and television that went far beyond its probable importance. The result was a very uncomfortable situation for the practitioner who had patients taking these medications. Since the practitioner and pharmacist had not been informed of the action by the time it was publicized, in most states they were deluged with calls from worried patients.

The practitioner can attempt to solve these problems of inadequate communication in several ways. One would be the creation of a communications line in state pharmacy societies. When drug regulation news is to be announced, the society could immediately distribute a message to every pharmacist in the state. The pharmacist, in turn, could notify the physicians in his local community so that he and the physician could be prepared to answer inquiries from patients. Another approach would be to use professional publications the practitioner receives.

All of this leads back to my opening contention: if drug regulation is to be effective, timely, and related to the realities of clinical practice, a better method of communication and feedback must be developed between the nongovernmental medical and scientific communities and the regulatory agency.

ue

Maker of Medicine

Henry W. Gadsden, Chairman & Chief Executive Officer, Merck & Co., Inc.

In my opinion, it is the responsibility of all physicians and medical scientists to take whatever steps they think are desirable in a law- and regulation-making process that can have far-reaching impact on the practice of medicine. Yet many events in the recent past indicate that this is not happening. For example, it is apparent from drug efficacy studies that the NAS/NRC panels gave little consideration to the evidence that could have been provided by practicing physicians.

There are several current developments that should increase the concern of practicing physicians about drug regulatory affairs. One is the proliferation of malpractice claims and litigation. Another is the effort by government to establish the relative efficacy of drugs. This implies that if a physician prescribes a drug other than the "established" drug of choice, he may be accused of practicing something less than first-class medicine. It would come perilously close to federal direction of how medicine should be practiced.

In order to minimize this kind of arbitrary federal action, a way must be found to give practitioners both voice and representation in government affairs. Government must be caused to recognize the essentiality of seeking their views. One of the difficulties today, however, is that there is no way for concerned practitioners to participate in the early stages of decision-making processes. They usually don't hear about regulations until a proposal appears in the Federal Register, if then. By that time a lot of concrete has been poured, and a lot of boots are in the concrete.

Physicians in private practice, and particularly clinicians, should press for representation on the advisory committees of the Food and Drug Administration, joining with academic and teaching hospital physicians and scientists who are already serving. Though practitioners may not have access to all available information, the value of their clinical experience should be recognized. Clinicians, for example, rightly remind us that difficulty in *proving* precise effects does not necessarily mean a drug is ineffective.

Unless practitioners are more involved in drug regulations, it will be increasingly difficult for the pharmaceutical industry and scientists elsewhere to make optimal progress in drug development. The benefit/risk ratio must be re-emphasized, and as part of this it must be acknowledged that benefit can come from the judgments of medical science as a whole. Even this concept, unfortunately, is not always accepted in drug regulatory processes. For example, if current medical opinion holds that an excess of total lipids and cholesterol in the blood is probably predisposing to atherosclerosis, and if a drug is discovered which reduces total lipids and cholesterol, the drug ought to be accepted *prima facie* as a contribution to medical science . . . until someone disproves the theory. The sponsor should not have to prove the theory as well as to develop and test the drug.

I feel a major new effort must also be made to erase the feeling of mistrust of medicine and of medicines that seems to be growing in the public consciousness. Triggered primarily by strident announcements in Washington, people are reading and hearing confidence-shaking things almost continuously. Although challenge and awareness are essential to medical advancement, our long-term goal is constructively to build, not destroy. This means strengthening patient-physician relationships based on mutual confidence and trust. And in matters of health policy, it means working toward participatory rather than adversary proceedings—where everyone with an interest and a capacity to contribute has an opportunity to be heard . . . and, if that opportunity is not spontaneously afforded him, he may seek it.

Opinion & Dialogue

What is your opinion, doctor?
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P·M·A

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MSMS in action

MSMS leads in student contacts

Efforts are being continued by MSMS leaders and staff to increase liaison with the medical students at the three Michigan medical schools. An AMA official recently observed that MSMS is one of the pace-setters in this important work.

MSMS in 1971 became one of the first state societies to seat students as full voting members of the House of Delegates. Representing each of the three Michigan SAMA chapters is one delegate and one alternate. The delegates may introduce and lobby for resolution on any subject. One of the student delegates served on a reference committee at the 1972 Spring House session. Only 13 states seat delegates.

In 1970, MSMS took the lead to work with three SAMA chapters to interest hospitals and doctors in the SAMA-MECO summer project. Eleven students were placed in 1970 and 51 students last summer. This year MSMS has obtained spots already for 90 students who will spend 10 weeks in community orientation programs across the state. The Michigan Hospital Association and Michigan Academy of Family Physicians cooperate in the project.

A cash contribution of $500 is given by MSMS each year to each SAMA chapter.

Beginning in 1970, MSMS has appointed students from the three medical schools to MSMS committees. There are students participating on about 10 committees now.

MSMS has a Planning and Priorities Committee working on future plans. The select committee includes a student.

Many doctors contribute to AMA-ERF to help make loans possible to students. In about 10 years, the AMA-ERF has loaned more than 1½ million dollars. During 1971, the AMA-ERF guaranteed loans for 73 U-M students, 88 WSU students and 20 MSU students for a total of $268,000. MSMS also encourages county medical societies to operate loan and grant programs.

MSMS has a liaison Committee with Medical Students, comprised of six students and six doctors.

The MSMS Liaison Committee with Medical Students (George Koepke, MD, Ann Arbor, Chairman) and the MSMS Education Liaison Committee (Brock E. Brush, MD, Detroit, Chairman) are working now on two matters of concern to students and the profession. Ways are being explored to provide MSMS financial assistance to needy medical students; and the two committees were designated by the MSMS Speaker to study reasons why a growing percentage of Michigan medical school graduates go to other states for internships.

Mark your calendar: 1972 Annual Session looms Oct. 1 - 5

It's time to make plans for the 1972 MSMS Annual Session.

The dates are Oct. 1-5, the place is again the Sheraton-Cadillac Hotel in Detroit, and, as usual, the annual meeting will be divided into two major parts: the three-day House of Delegates meeting and the two-day scientific sessions.

But the Michigan physicians who will travel to Detroit to attend the wide variety of stimulating and informing scientific meetings will find a new organization to the technical subjects.

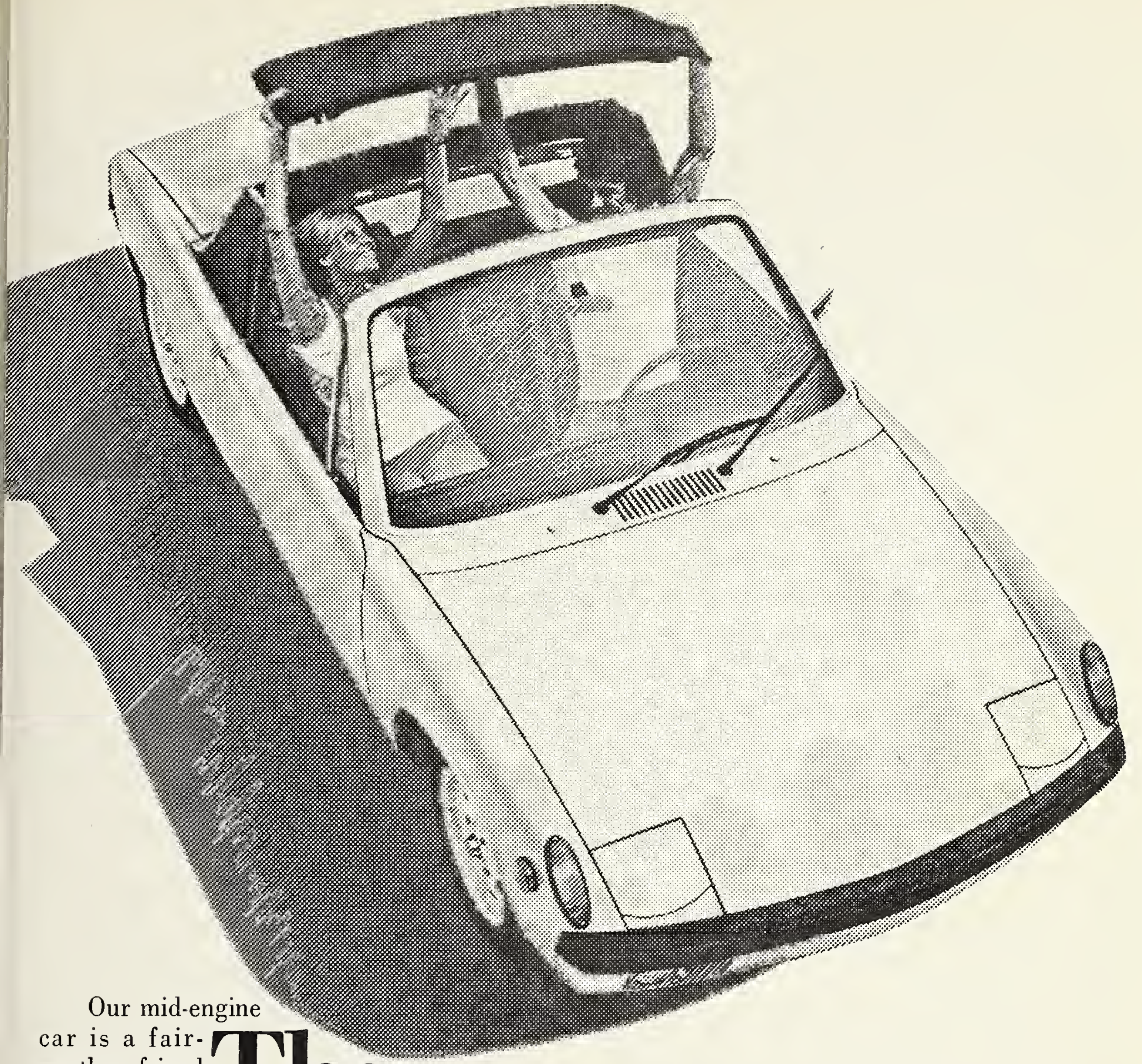
Throughout Wednesday and Thursday mornings, Oct. 4 and 5, two scientific meetings will meet concurrently. Specialty societies and related groups are being encouraged to hold their meetings during the afternoons.

Co-chairmen of the 1972 scientific program are Robert L. Tupper, MD, newly-appointed executive director of the Michigan Association for Regional Medical Programs, Lansing, and Richard D. Judge, MD, Ann Arbor, Department of Postgraduate Medical Education, The University of Michigan.

Preceding the Wednesday and Thursday scientific programs, a special session is planned from 2 to 5 p.m. Tuesday for MD and DO chiefs and vice chiefs of staff, chiefs of clinical departments and administrators of all Michigan medical and osteopathic hospitals. Its chairman is Richard W. Pomeroy, MD, director of medical education at E. W. Sparrow Hospital, Lansing.

On Wednesday afternoon, two postgraduate courses will be held. Their subjects will be fainting and strategies in the diagnosis and management of patients with recurrent chest pain. A postgraduate course on surgical approaches to coronary disease is planned from 2 to 5 p.m. Thursday afternoon.

The two concurrent sessions planned Wednesday morning, from 9 to 12 a.m., will take up surgical scientific and medical practical programs. On Thursday morning, the concurrent sessions will offer topics of medical scientific and surgical practical interest. Locations of the concurrent sessions will be the Grand and Crystal Ballrooms of the Sheraton-Cadillac.



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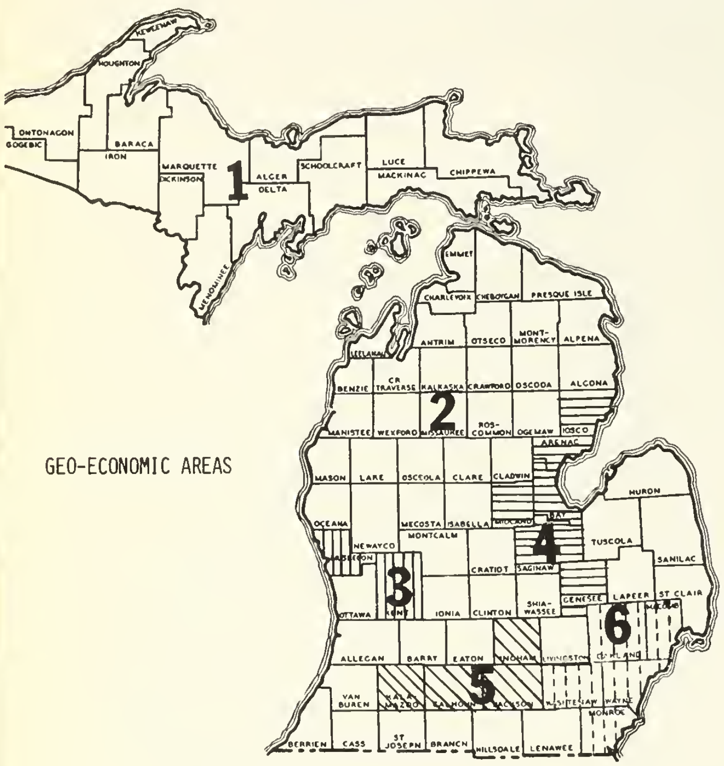
OVERSEAS DELIVERY AVAILABLE

Here are the facts on physicians' fees by area and procedure


GEO-ECONOMIC AREAS
1
2
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6
KEWEENAW
HOUGHTON
ONTONAGON
GOGEBIC
BARAGA
IRON
MARQUETTE
DICKINSON
MENOMINEE
ALGER
DELTA
SCHOOLCRAFT
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JACKSON
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WAYNE
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Michigan physicians charge a wide variety of fees for the same medical procedure, depending on the part of the state in which they reside.

That is the major conclusion of the 1971 MSMS survey of physician fees. The survey was initiated in July, 1971, by the MSMS Bureau of Economic Information, under the direction of the MSMS Committee on Medical Socio-Economics and The MSMS Council.

Nearly 3,500 completed surveys were returned, indicating Michigan physicians' great willingness to supply data to the Bureau of Economic Information.

The results of the fee survey are being made public here in *Michigan Medicine* and now will become a part of the statistical bank of the MSMS Bureau.

The actual state mean fee for a specific procedure or procedures can be obtained by requesting the data from the Bureau of Economic Information at MSMS Headquarters.

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An Explanation:

The procedures below are just a few of the hundreds of fees the Bureau now has information about. They demonstrate the wide variance of physicians' charges that now exist.

In light of the data generated by the "Physician Overhead Cost Study," where costs of providing health care were quite similar throughout the state, The MSMS Council assigned the Committee on Medical Socio-Economics to investigate the matter further, and to suggest possible alternatives to the present physician reimbursement mechanism.

The data below should be interpreted in the following manner:

If the state mean fee (x) for a tonsillectomy (code 2992) is $100, then the Area 1 mean fee is .88 multiplied by $100, or $88. Area 2's mean fee is $87, Area 3's mean fee is $83, Area 4's mean fee is $102, Area 5's mean fee is $106 and Area 6's mean fee is $112.

One more example will make it even clearer:

Let's assume the mean fee (x) is $175, then Area 1's mean fee is .91 multiplied by $175, or $159; Area 6's mean fee is 1.10 multiplied by $175, or $193.

MICHIGAN STATE MEDICAL SOCIETY

Physician Fee Survey

Code No.	Description	State Median Fee	State Mean Fee	Area 1 Mean Fee	Area 2 Mean Fee	Area 3 Mean Fee	Area 4 Mean Fee	Area 5 Mean Fee	Area 6 Mean Fee
1046	Puncture for aspiration of joint, initial	.92X	X	1.08X	.88X	1.08X	.92X	.96X	1.04X
2111	Bronchoscopy, diagnostic	.93X	X	.81X	.81X	.93X	1.38X	.85X	1.00X
2992	Tonsillectomy, with or without adenoidectomy, under age (12)	1.06X	X	.88X	.87X	.83X	1.02X	1.06X	1.12X
3261	Appendectomy	.98X	X	.91X	.93X	.76X	.99X	.94X	1.10X
3311	Sigmoidoscopy, diagnostic, initial	1.00X	X	.85X	.95X	.80X	1.00X	.95X	1.05X
3375	Hemorrhoidectomy, internal plus external	.94X	X	.87X	.84X	.76X	.98X	.92X	1.14X
3517	Cholecystectomy and pyloroplasty with partial vagectomy, with exploration of common duct	1.05X	X	.89X	.89X	.88X	.97X	.92X	1.09X
3631	Hernioplasty; herniorraphy; herniotomy, inguinal, unilateral	.96X	X	.99X	.92X	.80X	.99X	.91X	1.09X
3931	Cystoscopy: diagnostic, initial	1.04X	X	.75X	.96X	.77X	.73X	1.08X	1.13X
4321	Transurethral electrosection of prostate, including control of post operative bleeding, complete	1.01X	X	.89X	.90X	.91X	.94X	.97X	1.08X
4617	Panhysterectomy: total hysterectomy (corpus and cervix)	1.01X	X	.91X	.87X	.83X	.97X	.97X	1.12X
4646	Dilatation and curettage of uterus	1.00X	X	.87X	.78X	.73X	.85X	.92X	1.18X
4880	Obstetrical delivery and complete pre-partum and post-partum care	.97X	X	.85X	.86X	.96X	.97X	1.03X	1.15X
5611	Extraction of lens, intracapsular, or extracapsular, unilateral	.98X	X	1.02X	1.03X	.90X	.91X	.93X	1.09X
5998	Stapedectomy with reconstruction of ossicular chain, with vein graft or with introduction of prosthesis	.97X	X	N/A	.97X	.96X	.96X	1.06X	1.01X
7102	X-ray chest—2 views	1.00X	X	1.06X	1.00X	.69X	1.00X	1.00X	1.00X
7337	Upper gastro-intestinal tract, with or without delayed films	1.09X	X	.88X	1.00X	.84X	1.06X	.97X	1.03X
8957	Electrocardiogram, with interpretation and report	.94X	X	1.06X	.94X	1.06X	1.00X	1.06X	1.00X
	Initial visit with history and physical—office	.92X	X	.75X	.76X	.99X	.95X	1.09X	1.09X
	Initial visit with limited work-up—office	.75X	X	.68X	.71X	.89X	.92X	.94X	1.17X
	Follow-up or return visit—office	.80X	X	.65X	.67X	.91X	.97X	1.00X	1.14X

Michigan's only EKG phone service helps lower mortality

Transmission of EKGS by telephone from rural areas to medical centers for analysis by trained personnel is a concept now in use in a few areas of the United States.

Michigan has one such program, inspired by a Regional Medical Programs project to improve cardiac care in southwestern Michigan. The independent EKG program, under the direction of John H. Carter, MD, Benton Harbor, is one and a half years old.

Since the inception of the full RMP cardiac care project, according to Frank H. Bunker, MD, Benton Harbor, project director, mortality rates in severe myocardial infarction cases have dropped from 30 to 13 percent. The EKG program has played a part in this dramatic drop.

A similar project, involving the University of Michigan Hospital and nearby Saline, Mich., was expected to go before the MARMP board in April, and if approved, would become the second in Michigan. The Ann Arbor project would provide for telephone transmission of EKGs from Saline Community Hospital to University Hospital for interpretation there by the cardiac staff. The major difference over the Southwestern Michigan project would be the addition of medical histories to the information transmitted with each EKG from Saline.

In the following article, Doctor Carter describes the Southwestern Michigan EKG program:

By John H. Carter, MD
Clinton Wilson, MD
Benton Harbor

As electrocardiographic computer interpretations have become a useful adjunct to health care delivery, a new method of regional monitoring of the computer has been developed in six hospitals in

(Continued on page 476)

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CAUTION: Federal law prohibits dispensing without prescription.
Indications: Pre-Sate (chlorphentermine hydrochloride) is indicated in exogenous obesity, as a short term (*i.e.*, several weeks) adjunct in a regimen of weight reduction based upon caloric restriction.
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Warnings: When weight loss is unsatisfactory the recommended dosage should not be increased in an attempt to obtain increased anorexigenic effect; discontinue the drug. Tolerance to the anorectic effect may develop. Drowsiness or stimulation may occur and may impair ability to engage in potentially hazardous activities such as operating machinery, driving a motor vehicle, or performing tasks requiring precision work or critical judgment. Therefore, such patients should be cautioned accordingly. Caution must be exercised if Pre-Sate (chlorphentermine hydrochloride) is used concomitantly with other central nervous system stimulants. There have been reports of pulmonary hypertension in patients who received related drugs.
Drug Dependence: Drugs of this type have a potential for abuse. Patients have been known to increase the intake of drugs of this type to many times the dosages recommended. In long-term controlled studies with high dosages of Pre-Sate, abrupt cessation did not result in symptoms of withdrawal.
Usage In Pregnancy: The safety of Pre-Sate (chlorphentermine hydrochloride) in human pregnancy has not yet been clearly established. The use of anorectic agents by women who are or who may become pregnant, and especially those in the first trimester of pregnancy, requires that the potential benefit be weighed against the possible hazard to mother and child. Use of the drug during lactation is not recommended. Mammalian reproductive and teratogenic studies with high multiples of the human dose have been negative.
Usage In Children: Not recommended for use in children under 12 years of age.
Precautions: In patients with diabetes mellitus there may be alteration of insulin requirements due to dietary restrictions and weight loss. Pre-Sate (chlorphentermine hydrochloride) should be used with caution when obesity complicates the management of patients with mild to moderate cardiovascular disease or diabetes mellitus, and only when dietary restriction alone has been unsuccessful in achieving desired weight reduction. In prescribing this drug for obese patients in whom it is undesirable to introduce CNS stimulation or pressor effect, the physician should be alert to the individual who may be overly sensitive to this drug. Psychologic disturbances have been reported in patients who concomitantly receive an anorexic agent and a restrictive dietary regimen.
Adverse Reactions: Central Nervous System: When CNS side effects occur, they are most often manifested as drowsiness or sedation or overstimulation and restlessness. Insomnia, dizziness, headache, euphoria, dysphoria, and tremor may also occur. Psychotic episodes, although rare, have been noted even at recommended doses. **Cardiovascular:** tachycardia, palpitation, elevation of blood pressure. **Gastrointestinal**: nausea and vomiting, diarrhea, unpleasant taste, constipation. **Endocrine:** changes in libido, impotence. **Autonomic:** dryness of mouth, sweating, mydriasis. **Allergic:** urticaria. **Genitourinary**: diuresis and, rarely, difficulty in initiating micturition. **Others**: Paresthesias, sural spasms.
Dosage and Administration: The recommended adult daily dose of Pre-Sate (chlorphentermine hydrochloride) is one tablet (equivalent to 65 mg chlorphentermine base) taken after the first meal of the day. Use in children under 12 not recommended.
Overdosage: Manifestations: Restlessness, confusion, assaultiveness, hallucinations, panic states, and hyperpyrexia may be manifestations of acute intoxication with anorectic agents. Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension, or hypotension and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Fatal poisoning usually terminates in convulsions and coma.
Management: Management of acute intoxication with sympathomimetic amines is largely symptomatic and supportive and often includes sedation with a barbiturate. If hypertension is marked, the use of a nitrate or rapidly acting alpha-receptor blocking agent should be considered. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendations in this regard.
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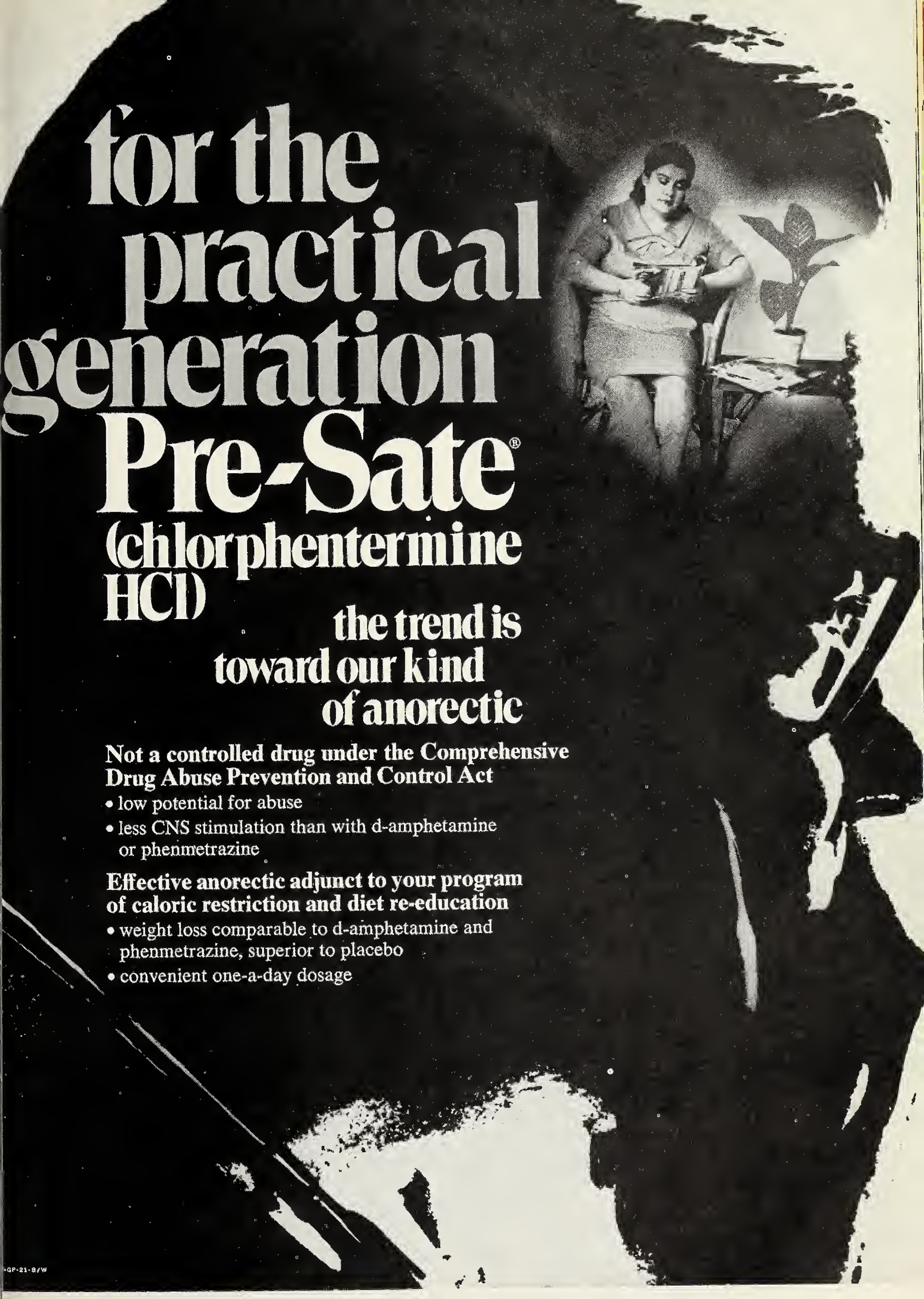

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John Carter, MD, checks an interpretation of an EKG that has just been received over the interphase at Benton Harbor's Mercy Hospital from an outlying hospital taking part in Michigan's only program to transmit EKGs by telephone.

TELEPHONE SERVICE/Continued

the tri-county area of southwestern Michigan. The service began in March, 1971.

Background

In 1969, a Regional Medical Program grant was obtained to improve diagnostic facilities and train physicians in the area of cardiovascular disease. The program prompted the coordination of hospital activities in the tri-county area (Berrien-Van Buren-Cass). Physicians were educated in the management of cardiovascular problems, particularly in hospitals where no internists were available. Aid had been furnished in developing new ICU's at three of these hospitals through the RMP grant.

By visits to outlying hospitals, the need for better and more rapid interpretation of EKG's, in all hospitals, became evident. Ten of the 11 internists serving a population of 140,000 were located in the single urban area of Benton Harbor and St. Joseph. EKG's to four hospitals were read by mail or telephone, but even telephoned transmitted EKG's were not available in the evening or on weekends. In 1970, regional monitoring of computer EKG analysis for tri-county hospitals was planned on an independent basis. Since it was not part of the RMP grant, it was important that the project be self-sufficient.

Methods and Materials

In October, 1970, the Interstate Computer Systems for Medicine in Kalamazoo, under direction of Roberta Barcala, MD, offered the computer analysis of EKG's using an IBM 1800 computer and a modified Smith Vector Program. A Marquette three channel cart prints and transmits a vector and 12 lead EKG by Wats line EKG to the computer from any patient's bed, ER, OR and ICU, and returns an interpretation by teletype within one to five minutes.

Marquette Electronics was asked to develop an interface that would furnish copies of all EKG's done at outlying hospitals with computer interpretation for immediate monitoring by an internist panel at Mercy Hospital. We planned to send corrections by teletype directly to the initiating hospitals. (See pictures 2 and 3.) The interface costing over $11,000 was available March, 1971. Monthly lease on the cart and teletype, plus special telephone lines, would total $470. Monthly costs for lease equipment for initiating hospitals is $240. The 24 hour coverage of taking tracings and teletype operation is furnished by three EKG technicians during the day and by Inhalation Therapy technicians at night, all locally trained. A monthly charge of $1 for each EKG which goes through the interphase is used to defray costs of equipment and personnel.

An EKG panel of 10 Benton Harbor-St. Joseph internists was formed that would verify, correct, compare previous EKG's and suggest appropriate tests on every computer-read EKG. A panel member on a rotating basis reads routinely at noon and 5 p.m., seven days a week. A panel call system provides an emergency interpretation. Readings needing immediate action are telephoned to the family physician. Well-attended monthly EKG panel meetings are held, summarizing numbers of EKG's (normal and abnormal) and accuracy of computer. Analysis of computer differences are relayed to the programmer at ICSM. Doctor Barcala has also been monitoring the computer for other hospitals and has

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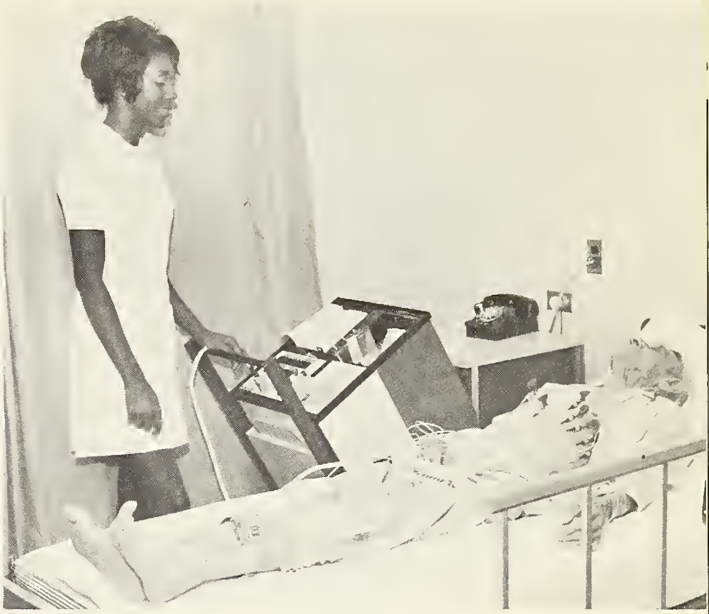


From Benton Harbor Mercy Hospital, an EKG is being transmitted through the EKG cart to the computer in Kalamazoo.

made improvements in the program. The panel also reviews interesting and difficult EKG's, pertinent literature on electrocardiography and correlations with coronary angiogram, pathology and other clinical information. These measures provide continuing updating of the system and panel.

Results and Discussion

Over 14,000 EKG's have gone through the interface during the last year. By July, 1971, the panel corrected tracings for six hospitals with a total of 650 acute care beds. Considering the complexity of the interface, the equipment has been very reliable.

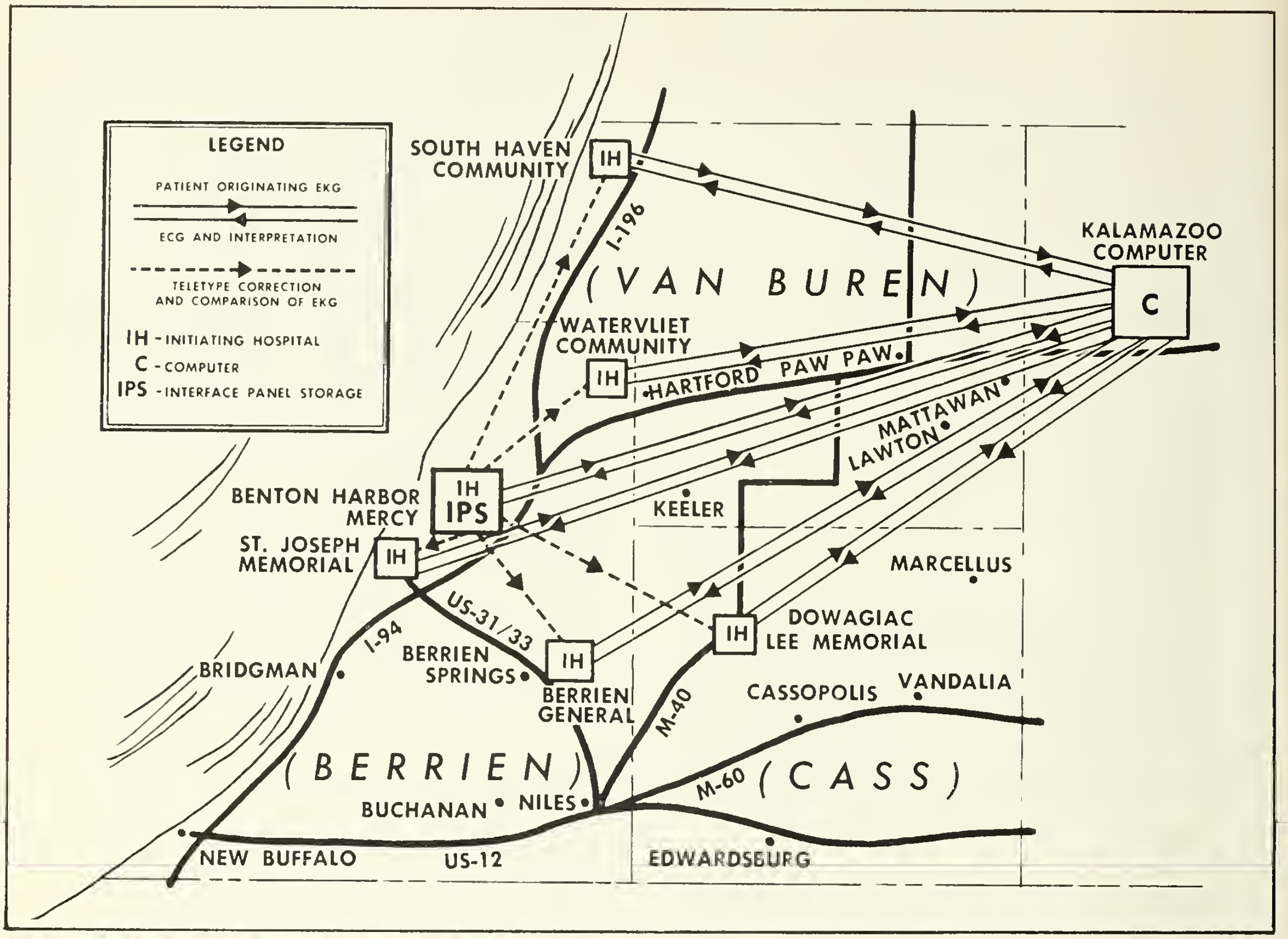
Through continuing computer reprogramming, the accuracy of the computer has improved from 92 to 96 percent for normals and 65 to 81 percent for abnormals. The most common deficiencies are: 1. Sino-atrial arrhythmias 2. Electrical pacemakers 3. Bilateral bundle branch block. The computer tends to slightly overread eight percent e.g. L.V.H.

The benefits and problems encountered during the last year are summarized in **Table I.** Problems have been less than anticipated and for the most part, have been solved.

Table I

Benefits

1. Early monitoring of the computer interpretation and consultation for emergency cardiovascular problems for the non-reader of EKG's.
2. Regional storage of EKG's. All are compared with previous tracing when available.
3. No additional cost to patient.
4. More consistent interpretations of EKG's.


LEGEND
PATIENT ORIGINATING EKG
ECG AND INTERPRETATION
TELETYPE CORRECTION AND COMPARISON OF EKG
IH - INITIATING HOSPITAL
C - COMPUTER
IPS - INTERFACE PANEL STORAGE
SOUTH HAVEN COMMUNITY
IH
I-196
KALAMAZOO COMPUTER
C
(VAN BUREN)
WATERVLIET COMMUNITY
IH
HARTFORD
PAW PAW
MATTAWAN
LAWTON
BENTON HARBOR MERCY
IH
IPS
KEELER
ST. JOSEPH MEMORIAL
IH
MARCELLUS
US-31/33
DOWAGIAC LEE MEMORIAL
IH
I-94
BERRIEN SPRINGS
IH
BERRIEN GENERAL
BRIDGMAN
CASSOPOLIS
VANDALIA
M-40
(BERRIEN)
M-60
(CASS)
BUCHANAN
NILES
NEW BUFFALO
US-12
EDWARDSBURG

Map of the area served by the Tri-County EKG transmission service showing organization of project.

5. Continued education in monthly EKG panel meetings.
6. Opportunity for new internists to equally participate in the program.
7. Example of tri-county interhospital and physician cooperation beneficial to all participants.
8. More general and comprehensive review of interesting cardiovascular pathology in the area.
9. Better utilization of internists' time.
10. Availability of the computer to expand its services to other areas of diagnosis such as pulmonary function tests, cardiac catheterization, ICU monitoring and electrolytes.

Problems

1. At this time most computer programs need improvement in interpretation of arrhythmias. Reprogramming has improved this and other problems. A new revision of the arrhythmia section will be ready next month with an expected accuracy greater than 90 percent.
2. Language of the computer interpretation is new to the physician, i.e., "unusual early depolarization." This has been steadily improved.
3. Programs for pediatric EKG's are inadequate because of variation with age.
4. Physician may be overly impressed with the computer interpretation and clinical information may be disregarded.
5. Internists must adjust to multichannel and a new cardiography method of interpreting EKG's. The internist must make his diagnosis, then check the computer diagnosis.

Conclusion

The EKG computer regional monitoring program has improved the accuracy and prompt delivery of EKG interpretations. It has made consultation in management readily available. The computer and internist complement each other in attaining this goal. It has provided another basis for a cooperating spirit among participating hospitals resulting in better patient care and making possible future cooperative endeavors.

The hospitals involved in this project are Mercy Hospital, Benton Harbor; Memorial Hospital, St. Joseph; Watervliet Community Hospital, Watervliet; Lee Memorial Hospital, Dowagiac; South Haven Community Hospital, South Haven; and Berrien General Hospital, Berrien Springs, Michigan. We would like to thank the staffs, administrations and boards for their cooperation.

New from Lederle
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Specifically formulated with
vitamins and minerals important
in the treatment of anemia

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Each tablet provides 115 mg elemental iron as the highly absorbable ferrous fumarate *plus* 600 mg of Vitamin C.

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TriHEMIC™ 600

HEMATINIC TABLETS

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Each tablet contains:

Vitamin C (Ascorbic Acid)	600 mg.
Vitamin B_{12} (Cobalamin Concentrate, N.F.)	25 mcg.
Intrinsic Factor Concentrate	75 mg.
Folic Acid	1 mg.
Vitamin E (*d*-Alpha Tocopheryl Acid Succinate)	30 Int. Units
Elemental Iron (as present in 350 mg. of Ferrous Fumarate)	115 mg.
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Available in Bottles of 30 Tablets.
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Precautions: Some patients affected with pernicious anemia may not respond to orally administered Vitamin B_{12} with intrinsic factor concentrate and there is no known way to predict which patients will respond or which patients may cease to respond. Periodic examinations and laboratory studies of pernicious anemia patients are essential and recommended. If any symptoms of intolerance occur, discontinue drug temporarily or permanently. Folic acid, especially in doses above 1 mg. daily, may obscure pernicious anemia, in that hematologic remission may occur while neurological manifestations remain progressive.

Adverse Reactions: G.I.: nausea, vomiting, diarrhea, abdominal pain. Skin rashes may occur. Such reactions may necessitate temporary or permanent changes in dosage or usage. Allergic sensitization has been reported following both oral and parenteral administration of folic acid.

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Lederle A Division of American Cyanamid Company, Pearl River, New York 10965

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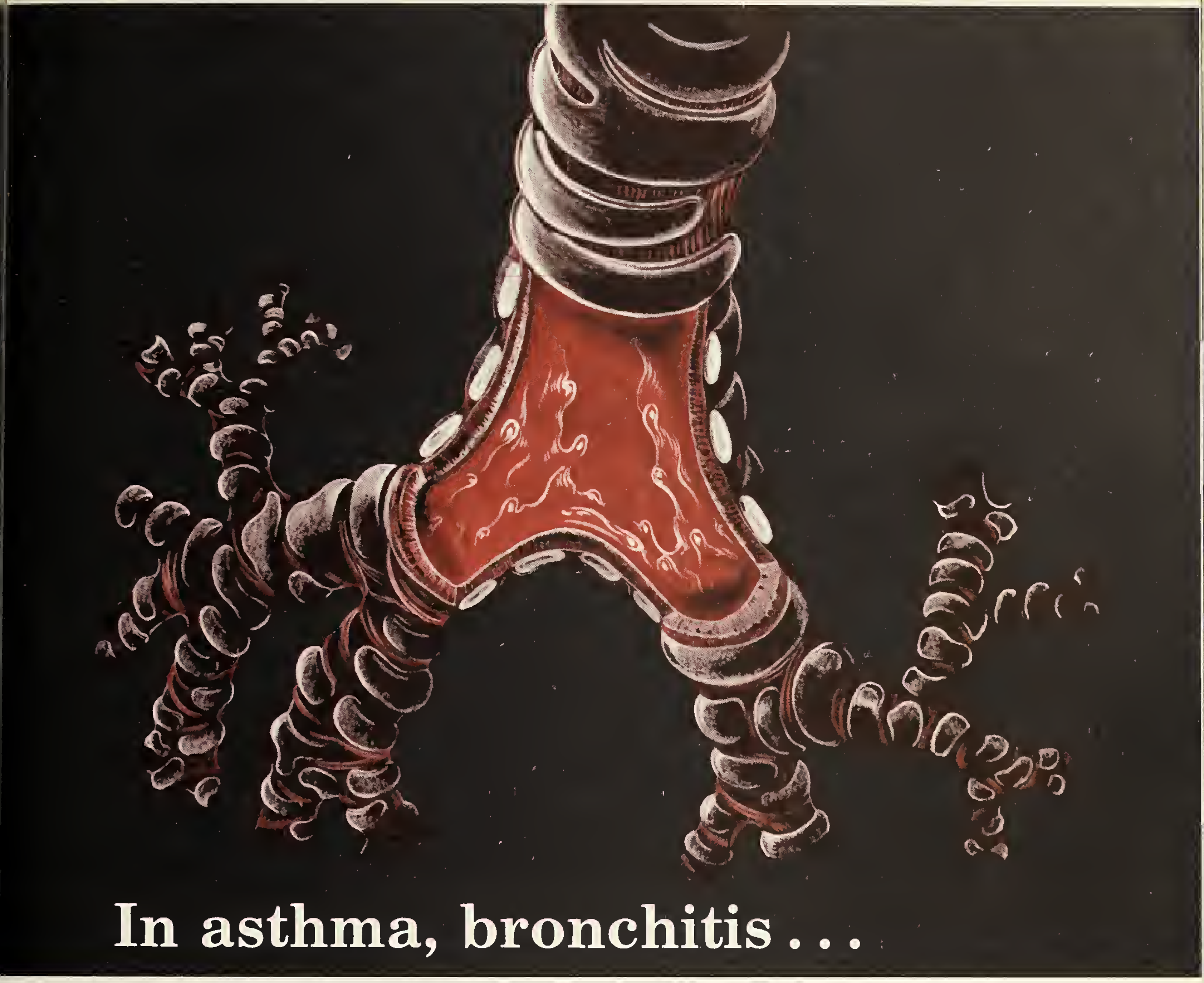

In asthma, bronchitis . . .

"Many physicians use iodides intravenously when they suspect that the main reason for airway obstruction is sticky mucus but oral iodides are more likely to exert an expectorant action."[1]

"For the viscid sputum, potassium iodide (. . . preferable as enteric coated tablets) may be best."[2]

Provide tastefree, well-tolerated KI in convenient SLOSOL coated tablets—

IODO-NIACIN®

COLE

Each SLOSOL coated tablet contains potassium iodide 135 mg. and niacinamide hydroiodide 25 mg.

please see next page for prescribing information—

Promote Productive Cough-

"The productive cough serves the necessary purpose of removing excess mucus from the bronchial tree."[3]

". . . there is clear evidence that the loosening of the bronchial mucus blanket must begin from within the underlying mucus glands where it is anchored and not from the surface. Complications of iodides are too occasional to avoid the use of this valuable medication."[3]

Rx Information:

INDICATIONS: The primary indication for Iodo-Niacin is in any clinical condition where iodide therapy is desired. All of the usual indications for the iodides apply to Iodo-Niacin and include:

RESPIRATORY DISEASE: The use of Iodo-Niacin is indicated whenever an expectorant action is desired to increase the flow of bronchial secretion and thin out tenacious mucus as seen in bronchial asthma, and other chronic pulmonary disease. Iodo-Niacin has also proven of value in sinusitis, bronchitis, bronchiectasis, and other chronic and acute respiratory diseases where the expectorant action of iodide is desired.

THYROID DISEASE: Iodo-Niacin is indicated in any thyroid disorder due to iodine deficiency, such as endemic goiter or hypoplastic goiter, and where hypothyroidism is secondary to iodine deficiency. Iodo-Niacin will suppress mild hyperthyroidism completely, and partially suppress more severe hyperthyroid states. Iodo-Niacin is also of value in suppressing the symptoms of hyperthyroidism and decreasing the size and vascularity of the thyroid gland prior to thyroidectomy.

ARTERIOSCLEROSIS: Iodides have been reported as relieving some of the symptoms associated with arteriosclerosis. The mechanism of action is unknown, but the effects are documented.

OPHTHALMOLOGY: Iodo-Niacin has been reported to be of value in retinal and vitreous hemorrhages. The mechanism of action is unknown, but absorption of the hemorrhagic areas has been observed following use of this drug. It is also reported to be of value in reducing or removing vitreous floaters.

SIDE EFFECTS: Serious adverse side effects from the use of Iodo-Niacin are rare. Mild symptoms of iodism such as metallic taste, skin rash, mucous membrane ulceration, salivary gland swelling, and gastric distress have occurred occasionally. These generally subside promptly when the drug is discontinued. Pulmonary tuberculosis is considered a contraindication to the use of iodides by some authorities, and the drug should be used with caution in such cases. Rare cases of goiter with hypothyroidism have been reported in adults who had taken iodides over a prolonged period of time, and in newborn infants whose mothers had taken iodides for prolonged periods. The signs and symptoms regressed spontaneously after iodides were discontinued. The causal relationship and exact mechanism of action of iodides in this phenomenon are unknown. Appropriate precautions should be followed in pregnancy and in individuals receiving Iodo-Niacin for prolonged periods.

DOSAGE: The oral dose for adults is two tablets after meals taken with a glass of water. For children over eight years, one tablet after meals with water. The dosage should be individualized according to the needs of the patient on long-term therapy.

HOW SUPPLIED: Cole's Iodo-Niacin tablets are available in bottles of 100, 500 and 1,000. Slosol coated pink. NDC 55-6458.

IODO-NIACIN®

Each SLOSOL tablet contains potassium iodide 135 mg. and niacinamide hydroiodide 25 mg. Sig. *ij* tabs. t.i.d. p.c.

References: 1. Itkin, I. H., Am. Fam. Phys. 4:83, 1971. 2. Feinberg, S. M., Consultant Sept., 1971, pg. 32. 3. Bookman, R., Ann. Allerg. 29:367, 1971.

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A gratifying announcement about Empirin® Compound with Codeine

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It is significant in this era of increased regulation, that Empirin Compound with Codeine has been placed in a less restrictive category. You may now wish to consider Empirin with Codeine even more frequently for its predictable analgesia in acute or protracted pain of moderate to severe intensity.

Empirin Compound with Codeine No. 3 contains codeine phosphate* (32.4 mg.) gr. ½. No. 4 contains codeine phosphate* (64.8 mg.) gr. 1. *(Warning—may be habit-forming.) Each tablet also contains: aspirin gr. 3½, phenacetin gr. 2½, caffeine gr. ½.

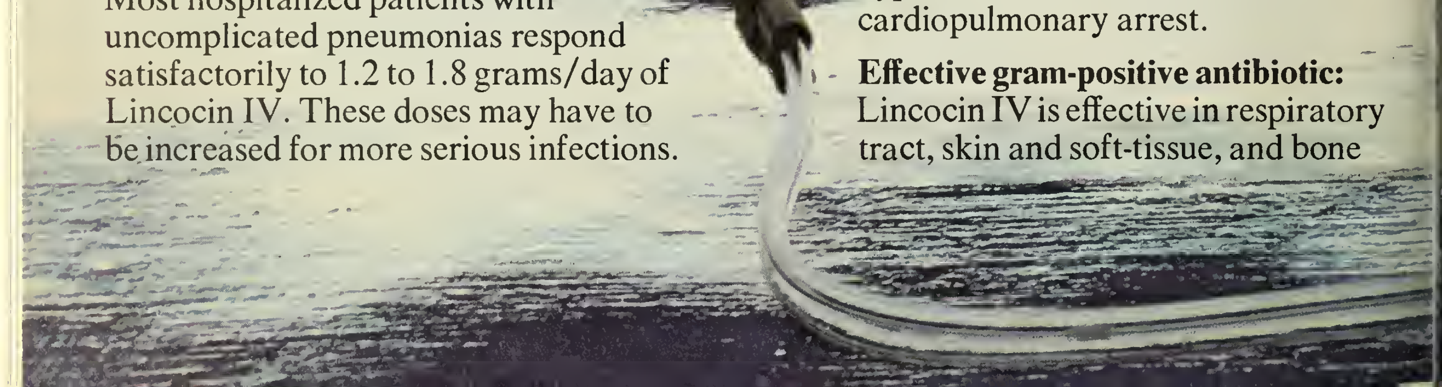
When you select this familiar antibiotic for IV infusion you have available a broad dosage range that hospitalized patients may need.

Intravenous Lincocin (lincomycin hydrochloride, Upjohn), with its 1.2 to 8 grams/day dosage range, covers many serious and even life-threatening infections. Lincocin is effective in infections due to susceptible strains of streptococci, pneumococci, and staphylococci. Lincocin IV therefore can be as useful in your hospitalized patients as its IM use has proved to be in your office patients. As with all antibiotics, *in vitro* susceptibility studies should be performed.

1.2 to 8 grams/day IV dosage range: Most hospitalized patients with uncomplicated pneumonias respond satisfactorily to 1.2 to 1.8 grams/day of Lincocin IV. These doses may have to be increased for more serious infections. In life-threatening situations as much as 8 grams/day has been administered intravenously to adults.

In usual IV doses, Lincocin (lincomycin hydrochloride, Upjohn) should be diluted in 250 ml or more of normal saline solution or 5% glucose in water. But when 4 grams or more per day is given, Lincocin should be diluted in not less than 500 ml of either solution, and the rate of administration should not exceed 100 ml/hour. Too rapid intravenous administration of doses exceeding 4 grams may result in hypotension or, in rare instances, cardiopulmonary arrest.

Effective gram-positive antibiotic: Lincocin IV is effective in respiratory tract, skin and soft-tissue, and bone



fections caused by susceptible strains
f pneumococci, streptococci, and
aphylococci, including penicillin-
sistant strains. Staphylococcal strains
sistant to Lincocin (lincomycin
ydrochloride, Upjohn) have been
covered. Before initiating therapy,
ılture and susceptibility studies should
e performed. Lincocin has proved
aluable in treating patients hyper-
nsitive to penicillin or cephalosporins,
nce Lincocin does not share
ntigenicity with these compounds.
owever, hypersensitivity reactions
ave been reported, some of these in
atients known to be sensitive to
enicillin.

ell tolerated at infusion site: Lincocin
ntravenous infusions have not
roduced local irritation or phlebitis,
hen given as recommended. Lincocin
usually well tolerated in patients who
re hypersensitive to other drugs.
evertheless, Lincocin should be used
autiously in patients with asthma or
gnificant allergies.

n patients with impaired renal function,
e recommended dose of Lincocin
hould be reduced to 25–30% of
e dose for patients with normal
idney function. Its safety in
regnant patients and in infants
ss than one month of age has
ot been established.

**incocin may be used with other
ntimicrobial agents:** Since Lincocin
stable over a wide pH range, it is
uitable for incorporation in
ntravenous infusions; it also may be
administered concomitantly with other antimicrobial agents when indicated. However, Lincocin should not be used with erythromycin, as *in vitro* antagonism has been reported.

Lincocin®
Sterile Solution (300 mg per ml)
(lincomycin hydrochloride, Upjohn)
For further prescribing information, please see following page.

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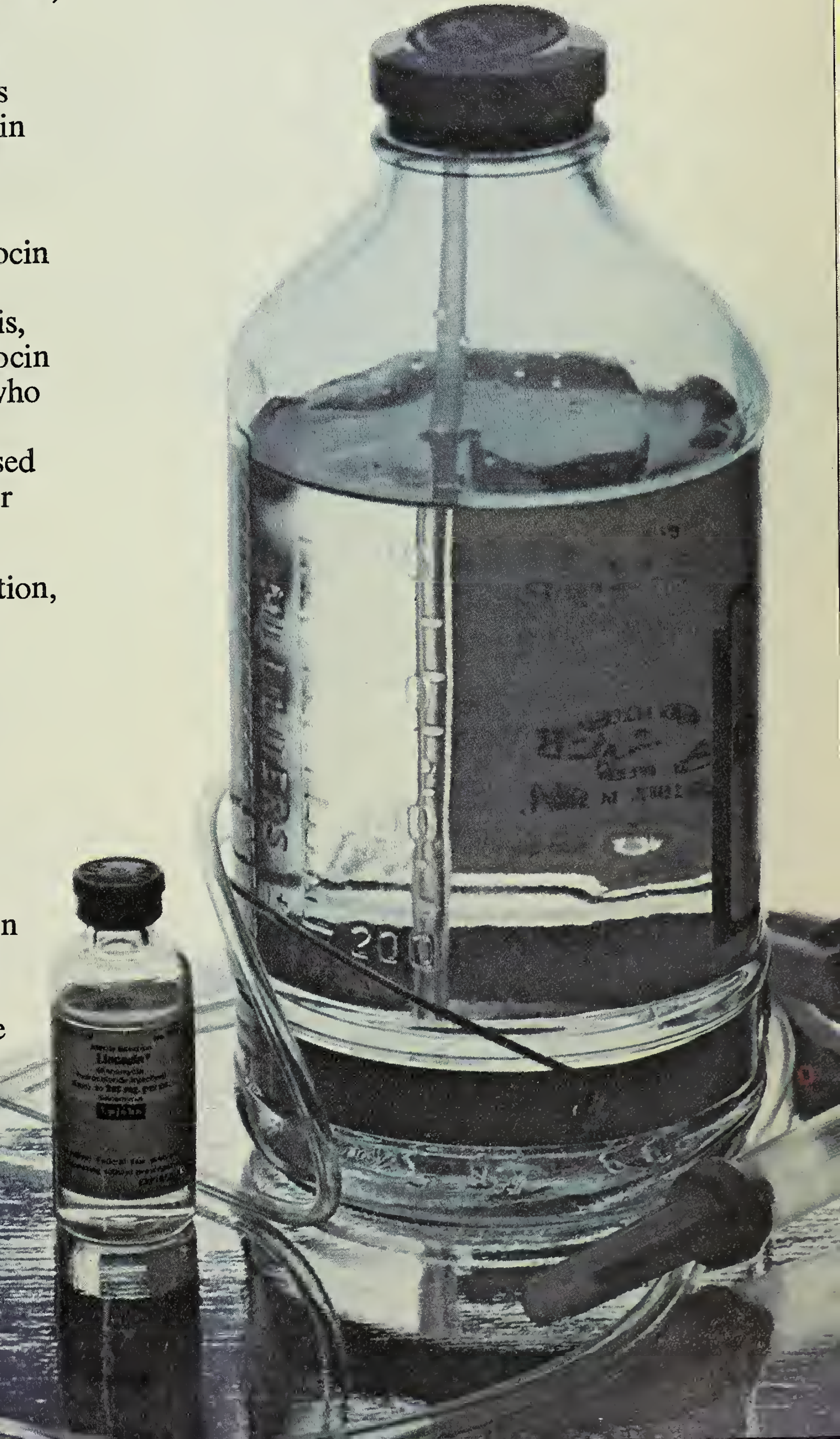

• Sterile Solution (300 mg. per ml.) •

Lincocin®

(lincomycin hydrochloride, Upjohn)

Up to 8 grams per day by IV infusion for hospitalized patients with life-threatening infections. Lincocin is effective in infections due to susceptible strains of streptococci, pneumococci, and staphylococci. As with all antibiotics, *in vitro* susceptibility studies should be performed.

Each preparation contains:	Lincomycin hydrochloride monohydrate equivalent to lincomycin base
250 mg Pediatric Capsule	250 mg
500 mg Capsule	500 mg
*Sterile Solution per 1 ml	300 mg
Syrup per 5 ml	250 mg

*Contains also: Benzyl Alcohol 9 mg; and, Water for Injection—q.s.

Lincocin (lincomycin hydrochloride) is indicated in infections due to susceptible strains of staphylococci, pneumococci, and streptococci. *In vitro* susceptibility studies should be performed. Cross resistance has not been demonstrated with penicillin, ampicillin, cephalosporins, chloramphenicol or the tetracyclines. Some cross resistance with erythromycin has been reported. Studies indicate that Lincocin does not share antigenicity with penicillin compounds.

CONTRAINDICATIONS: History of prior hypersensitivity to lincomycin or clindamycin. Not indicated in the treatment of viral or minor bacterial infections.

WARNINGS: *CASES OF SEVERE AND PERSISTENT DIARRHEA HAVE BEEN REPORTED AND HAVE AT TIMES NECESSITATED DISCONTINUANCE OF THE DRUG. THIS DIARRHEA HAS BEEN OCCASIONALLY ASSOCIATED WITH BLOOD AND MUCUS IN THE STOOLS AND HAS AT TIMES RESULTED IN AN ACUTE COLITIS. THIS SIDE EFFECT USUALLY HAS BEEN ASSOCIATED WITH THE ORAL DOSAGE FORM BUT OCCASIONALLY HAS BEEN REPORTED FOLLOWING PARENTERAL THERAPY.* A careful inquiry should be made concerning previous sensitivities to drugs or other allergens. Safety for use in pregnancy has not been established and Lincocin (lincomycin hydrochloride) is not indicated in the newborn. Reduce dose 25 to 30% in patients with severe impairment of renal function.

PRECAUTIONS: Like any drug, Lincocin should be used with caution in patients having a history of asthma or significant allergies. Overgrowth of nonsusceptible organisms, particularly yeasts, may occur and require appropriate measures. Patients with pre-existing monilial infections requiring Lincocin therapy should be given concomitant antimonilial treatment. During prolonged Lincocin therapy, periodic liver function studies and blood counts should be performed. Not recommended (inadequate data) in patients with pre-existing liver disease unless special clinical circumstances indicate. Continue treatment of β-hemolytic streptococci infections for 10 days to diminish likelihood of rheumatic fever or glomerulonephritis.

ADVERSE REACTIONS: *Gastrointestinal*—Glossitis, stomatitis, nausea, vomiting. Persistent diarrhea, enterocolitis, and pruritus ani. *Hemopoietic*—Neutropenia, leukopenia, agranulocytosis, and thrombocytopenic purpura have been reported. *Hypersensitivity reactions*—Hypersensitivity reactions such as angioneurotic edema, serum sickness, and anaphylaxis have been reported, sometimes in patients sensitive to penicillin. If allergic reaction occurs, discontinue drug. Have epinephrine, corticosteroids, and antihista-
mines available for emergency treatmen
Skin and mucous membranes—Skin rashe
urticaria, vaginitis, and rare instances of ex
foliative and vesiculobullous dermatitis hav
been reported. *Liver*—Although no direct re
lationship to liver dysfunction is establishe
jaundice and abnormal liver function test
(particularly serum transaminase) have bee
observed in a few instances. *Cardiovascula*
—Instances of hypotension following paren
teral administration have been reported
particularly after too rapid IV administra
tion. Rare instances of cardiopulmonary ar
rest have been reported after too rapid I
administration. If 4.0 grams or more admin
istered IV, dilute in 500 ml of fluid an
administer no faster than 100 ml per hour
Special senses—Tinnitus and vertigo hav
been reported occasionally. *Local reaction*
—Excellent local tolerance demonstrated t
intramuscularly administered Lincoci
(lincomycin hydrochloride). Reports of pai
following injection have been infrequent
Intravenous administration of Lincocin i
250 to 500 ml of 5% glucose in distille
water or normal saline has produced n
local irritation or phlebitis.

HOW SUPPLIED: *250 mg* and *500 m*
Capsules—bottles of 24 and 100. *Steril*
Solution, 300 mg per ml—2 and 10 ml vial
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Your opinion please

MSMS asked the question:

"How would you propose that MSMS, the component societies, or the specialty societies work to further improve the access to health care, or the entry of the patient into the present modes of medical practice?"

These doctors replied:

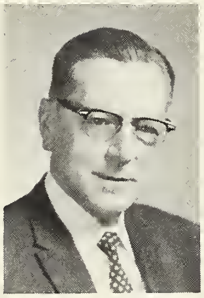
Joseph W. Christie, MD
St. James, Beaver Island

Let your physician direct your medical destinies as he knows and he cares. The medical society must urge all patients to have a personal physician, meeting him and registering the name with the physician's receptionist! In this way if sickness strikes, the patient will be cared for or be referred to the proper specialist. When therapy is over, the specialist will then send the patient back with diagnosis and treatment. The receptionist will keep a current alphabetical file with pertinent data in the physician's office. Should the load become too heavy, the physician must not take new families or he might decide to take in an associate MD. When away, the physician will have another MD take over until he returns.

The so-called "Welcome Wagon Approach" will be made to all newcomers to the community, allowing them to know the medical society does care about their health needs, as a family doctor is eager to counsel the parents and teenagers on narcotics and dangerous drugs as well as sex and venereal disease.

We should say to all patients, "Allow your family physician to be your 'clearing house' for complete medical services as he is a professional in the art and his credentials and character have been well checked out by the state and county medical society. You are entitled to the best medical service and you will and can secure the best."

(A fine idea as our "Image" is tarnished by our politicians. If we don't act now, this may be "Custer's Last Stand.")


Doctor Fisher

Robert E. Fisher, MD
Battle Creek

Since access to education has become a "right," the product of the system has not shown more rationality, wisdom, self-discipline, or humaneness.

Access to health care is not going to produce healthier citizens, and incentives for restraints on access against both the consumer and the provider must be contained in any national health care scheme which is to succeed. We are presently spending $78 billion annually on health care and could spend 50 percent of the Gross National Product on it if we were so disposed. Society is so far away from knowing what it wants that any plan should have provisions for changing priorities among health services and between health care and other types of social investment in the quality of life; furthermore, delivery plans should not be firmly fixed in basic law.

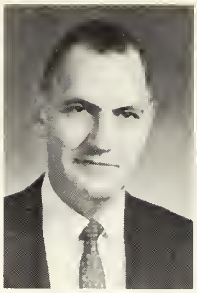
If the British people were satisfied with their end of their system there would be no room for "The Patients' Association"—a "flourishing organization with the stated purpose of safeguarding the rights and dignities of those entrusted to our care" and if the Minister of Health 1964-68 was pleased with his end of the system he would not have stated in 1971 "some social processes, such as national health programs, are irreversible by the destruction of the alternatives to them."

It is our duty to try to preserve the alternatives until sanity returns. We have no other administrative duty at this time. If it is difficult for patients to "get into" the system, other than through an emergency room, some such plan as the following might be tried.

1. Physicians of all specialties would agree to respond to telephone calls from would-be patients, and give information, not medical advice.

2. Physicians, and clinics, and hospitals would agree to accept patients referred from (1), and

Doctor Haeck



Doctor Redmon

hospital emergency rooms would cease being the point of entry except for medical emergencies.

3. A doctor (and this is the essence of the plan) would reassure the would-be patient, and tell him what to do and where to go and how to get there, and to go at once if there was really urgency apparent.

4. Once this was set up, the society would commence an intensive campaign to familiarize the citizens with a single telephone number, 769 74-2426 (PHYSICIAN) state-wide, but by districts.

5. The society would set up switchboards by districts and record each call, on tape. The tapes would be transcribed with copies for the patient-to-be, the responding physician, the referred-to physician or clinic or agency, and to a file.

6. The file would be analyzed for intensity of use and quality of advice given, the findings reported to the membership.

7. For the experimental period, physician time would not be carried as an expense; other costs would be charged to the would-be patient or the intermediary. A permanent program *would* have to include cost of physician time.

8. There is no way to provide access to those who do not have access to a telephone.

William Haeck, MD
Grand Rapids

The question presupposes that the method of the delivery of health care remain as it is today; and as I understand the question, that it be made more available to the general public.

The only way that it can be made more available to the public is to increase the number of doctors providing patient care; and to increase the efficiency of those already providing that patient care. The private free enterprise system of medicine recognizes that it must do a better job of delivering health care and therefore has advocated changes which even now are being put into effect.

We should:

1) Advocate a re-emphasis on education in the medical schools; rather than that medical schools continue primarily as research centers. This in itself would allow enrollments to increase.

2) Reduce the number of physicians now working for the government. There are now 30,000 doctors working for Uncle Sam, more than 6,000 of whom are not involved in patient care.

3) Continue to innovate new teaching programs which have their emphasis on patient care, such as those now being carried out by Michigan State University's College of Human Medicine. We should get away from the emphasis in our medical schools on research, academic or government work.

4) Return to the use of practitioners as part time medical faculty. This will release some full time teachers for the care of patients and it will expose students to practicing physicians.

5) Shorten the education process by rearranging curriculums. This will permit schools to graduate more physicians and yet not reduce the quality of the graduate.

6) Encourage hospitals to establish "self care" units. This will not only reduce hospitalization costs but will also save physicians' time.

7) Encourage the use of surgical out patient units for minor surgery. Again, this will reduce the cost of medical care and save physicians' time.

8) Make more extensive use of paramedical personnel in various ways to reduce the time a physician must spend with patients.

All of the above suggestions have in mind two ways in which access to medical care can be improved: increase the number of physicians who will care for patients; and increase the time that a physician has to spend in patient care. MSMS should continue to work towards these ends.

William B. Redmon, MD
Midland

The first thought that comes to mind in attempting to improve access to health care is to broaden, as much as possible, the use of paramedical personnel. Much has recently been said and written concerning this subject and steps are, indeed, being taken to implement it. In talking to other physicians (both in Michigan and elsewhere) my impression is that everyone is "for it" at the same time "afraid of it." Much of this fear seems to center around the problem of legal liability and the difficulties in establishing boundaries for the activities of paramedical personnel.

We should utilize all facilities in the training of such individuals—for example, services of hospital emergency rooms or general hospital services (such as surgery—Dr. Richard Pomeroy's Program for orthopaedic technicians certainly fits here) and especially in our own offices. I do believe that physicians should be encouraged, as much as possible, to participate in such programs of training and to utilize, as much as possible, the services of these individuals when trained and available.

I do believe that we should ask the state legislature, and, if possible, the courts to help us in accu-

(Continued on page 492)

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rately defining legal liability in order to remove, insofar as possible, the ever-present fear of litigation.

I feel, also, that the local societies, in particular, could render considerable service by helping to organize clinics for mass examinations of groups of youngsters. These would include athletic examinations necessary for intermediate and high school athletics; camp examinations and similar services. Such arrangements are already being carried out in some communities. These are, regretfully, not state-wide as they perhaps could and should be. With greater emphasis being continually placed on physical fitness and participation in athletics, the necessity for examination of larger groups of youngsters for participation in such athletics (this is particularly true in women's athletics at the high school level) will continue to be a great need.

Finally, the various specialty groups could, I believe, broaden their educational programs and extend their educational programs by lecture and demonstrations by physicians in smaller and outlying communities. Some effort is already being made in this direction. I believe that it could be considerably extended.

MSMS offers group insurance to interns, residents

Michigan interns and residents are now eligible to subscribe to the MSMS Group Disability Insurance Program for the minimal charge of $10. The payment of the fee also makes the intern or resident an associate member of MSMS.

At its March 19 meeting, the MSMS Council approved the new insurance proposal of the MSMS Committee on Professional Insurance Plans. The insurance is carried by the Provident Life and Accident Insurance Co. and handled for MSMS by the Ben P. Stratton Agency of Lansing.

The MSMS Disability Insurance Program is available to interns residents under age 34 and offers $325 monthly indemnity on a lifetime-accident, five year sickness plan. Benefits commence the first day for accident and 16th day for sickness at the annual premium of $10.

By offering the plan to interns and residents, MSMS demonstrates its vital interest in the future members which provide the lifeblood of the society, and also provides a continual influx of new, young physicians in the group disability program.

Doctors tell your AMA leaders what you want

By Brooker L. Masters, MD
Chairman, MSMS Council

Tell your AMA Delegates what you think.

Recently, the AMA made an unprecedented move in seeking opinions of the dues-paying members in matters which will guide House and Board of Trustees in the development of policies.

Yet, there is more you can do. You owe it to yourself and organized medicine to talk to your Michigan Delegate to the AMA and tell him what you think AMA ought to be doing for physicians and the future of medicine.

Leadership must know what the constituency wants. Without this knowledge, leadership votes its own personal opinions.

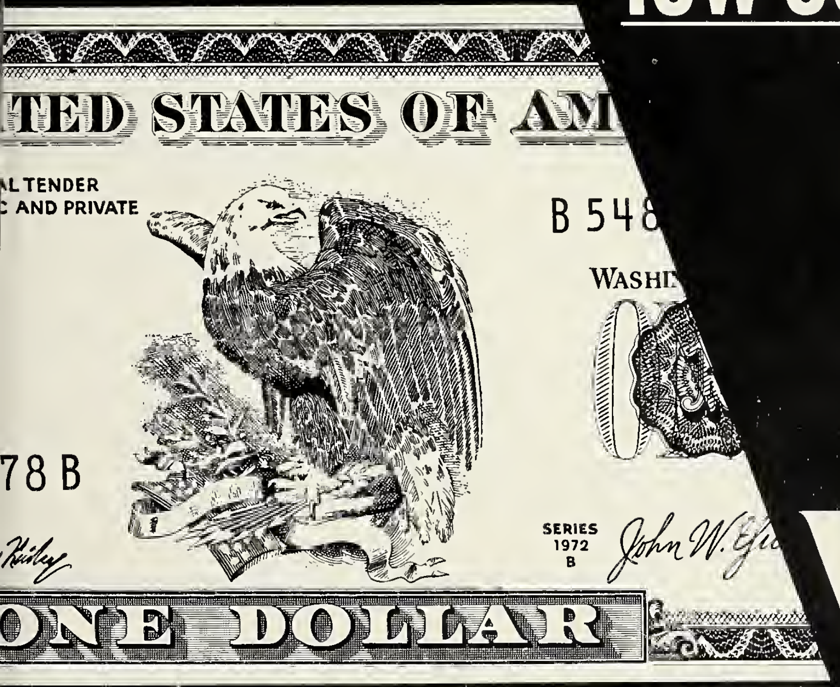
Here is a list of your Delegates and Alternates, call or write today.

AMA delegates

John J. Coury, MD, 1225 Tenth St., Port Huron, 48060; George W. Slagle, MD, 203 Capital Ave., NE, Battle Creek, 49017; Donald N. Sweeny, Jr., MD, 8445 E. Jefferson Ave., Detroit, 48214; Joseph A. Witter, MD, 1745 Tiverton Road, #23, Bloomfield Hills, 48013; Otto K. Engelke, MD, 313 Washtenaw Co. Bldg., Ann Arbor; Paul T. Lahti, MD, 3600 W. 13 Mile Road, Royal Oak, 48072; John W. Moses, MD, Mt. Carmel Mercy Hospital, Detroit, 48235, and Robert E. Rice, MD, Memorial Clinic, 420 S. Bower St., Greenville, 48838.

Alternates

James C. Danforth, Jr., MD, 20175 Mack Avenue, Grosse Pointe Woods, 48236; Marjorie Peebles Meyers, MD, 3790 Woodward Ave., Detroit, 48201; Robert C. Prophater, MD, 202 Boehringer Court, Bay City, 48706; Vernon V. Bass, MD, 3322 Davenport St., Saginaw, 48602; Frank B. Walker II, MD, 1206 Balfour Road, Grosse Pointe Park, 48230; Donald T. Anderson, MD, 408 Hamilton Road, Kingsford, 49801; Richard J. McMurray, MD, 2675 Flushing Road, Flint, 48504, and Brooker L. Masters, MD, 111 W. Dayton St., Fremont, 49412.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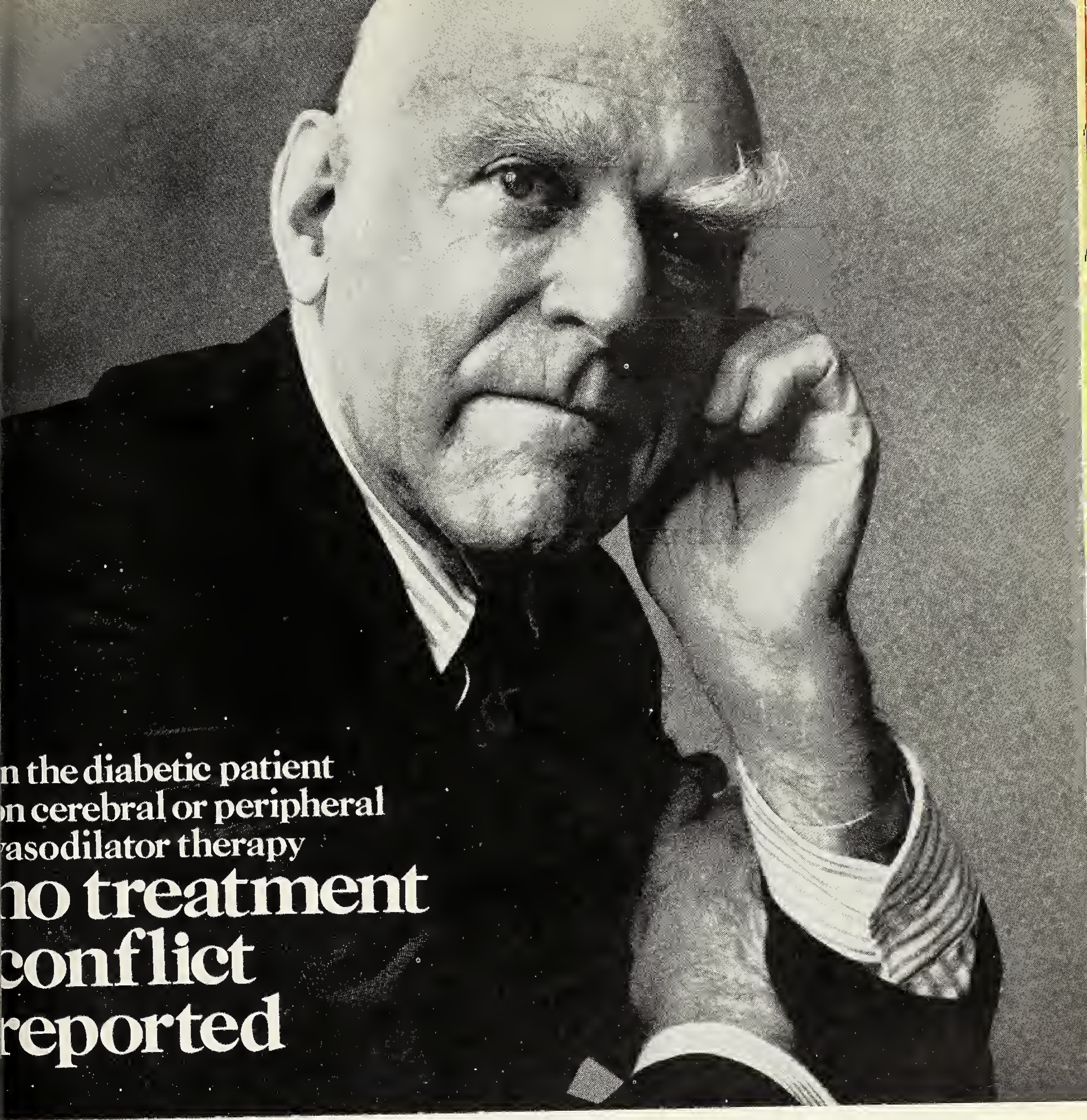
The MSMS conference room was filled with members of MSMS committees on Government Medical Care Programs and Rural Medical Service when they dined jointly to hear progress reports on two health delivery projects in Detroit.

Maurice S. Reizen, MD, left, director of the State Health Department, visits with Robert E. Rice, MD, right, chairman of the MSMS Committee on Government Medical Care Programs, and Donald R. McCorvie, MD, standing, chairman of the MSMS Committee on Rural Medical Service.

Homer C. Smathers, MD, center, Wayne County Medical Society president, views one of the slides used during a presentation by Thomas Batchelor, MD, right, about medical care provided by the Model Neighborhood Comprehensive Health Programs, Inc. John Mucasey, MD, left, also spoke at a joint meeting of the MSMS Committees on Government Medical Care Programs and Rural Medical Service at the MSMS building. Topic was the Woodland Medical Group, Inc., P.C.

New delivery systems studied by committees

Participating in one of the informal discussions at the joint meeting were Robert E. Stelle, MD, standing, Crystal Falls, and George Drake, seated, third-year MSU medical student. A growing number of MSMS committees include medical students from the three Michigan schools.



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Indications: Cerebrovascular insufficiency, arteriosclerosis obliterans, diabetic vascular diseases, thromboangiitis obliterans (Buerger's disease), Raynaud's disease, postphlebitic conditions, acroparesthesia, frostbite syndrome and ulcers of the extremities (arteriosclerotic, diabetic, thrombotic). Composition: VASODĪLAN tablets, isoxsuprine HCl 10 mg. and 20 mg. Dosage: Oral—10 to 20 mg. t.i.d. or q.i.d. Contraindications and Cautions: There are no known contraindications to recommended oral dosage. Do not give immediately postpartum or in the presence of arterial bleeding. Side Effects: Occasional palpitation and dizziness can usually be controlled by dosage reduction. Complete details available in product brochure from Mead Johnson Laboratories. References: (1) Samuels, S. S., and Shaftel, H. E.: J. Indiana Med. Ass. *54*:1021-1023 (July) 1961. (2) Clarkson, I. S., and LePere, D. M.: Angiology *11*:190-192 (June) 1960. (3) Horton, G. E., and Johnson, P. C., Jr.: Angiology *15*:70-74 (Feb.) 1964. (4) Dhrymiotis, A. D., and Whittier, J. R.: Curr. Ther. Res. *4*:124-128 (April) 1962. (5) Whittier, J. R.: Angiology *15*:82-87 (Feb.) 1964.

Mead Johnson
LABORATORIES

143 Michigan cities seek family doctors; nearly 60 more need other specialists

Once again, as a service to physicians, *Michigan Medicine* publishes the list of Michigan communities needing family practitioners and other specialists. The list is compiled by the Michigan Health Council, which operates a free MD Placement Service under MSMS guidance.

The Health Council's list of communities needing family physicians immediately follows this introduction.

The specialty roster, which is available at all times from the Health Council, lists the current opportunities by area, then alphabetically by city within the area. The Health Council uses a system of local advisors, the immediate past presidents of their component medical societies, to verify the need for an MD in a particular area. Physicians interested are invited to write the local advisors directly for an appraisal of the need in that area.

Special bulletins are issued every 30 to 60 days by the Health Council, and contain information about new opportunities. All specialists registered with the Placement Service receive the bulletin automatically when an opening becomes available.

In addition to placement information, the Health Council has a free list available to medical students of approved residencies in Michigan. The list may be obtained by writing to the Health Council, 712 Abbott Road, Box 1010, East Lansing, 48823.

The Michigan Health Council currently has 142 communities that are seeking general practitioners. They are as follows:

UPPER PENINSULA—Baraga, Bessemer, Crystal Falls, Escanaba, Ewen, Hancock-Houghton, Iron Mountain-Kingsford, Iron River, Manistique, Marquette, Menominee, Newberry, Norway, Rock, St. Ignace, Sault Ste. Marie, Wakefield

NORTH CENTRAL—Alpena, Charlevoix, Frankfort, Gaylord, Grayling, Hillman, Houghton Lake-Prudenville Area, Indian River, Lewiston, Lincoln, Mackinaw City, Mancelona, Roscommon, St. Helen, West Branch

WEST CENTRAL—Baldwin, Barryton, Belding, Big Rapids, Edmore and Township, Eureka, Fremont, Grand Haven, Hart, Holton, Kent City, Lakeview, Lowell, Ludington, Manistee, Muskegon, Newaygo, Onekama, Ovid, Ravenna, Reed City, St. Johns, Scotville, Shelby, Whitehall, Zeeland

EAST CENTRAL—Almont, Bad Axe, Bay City, Byron, Caseville, Cass City, Columbiaville-Otter Lake Area, Deckerville, Emmett, Flint, Hale, Harrison, Laingsburg, Lapeer, Marlette, Memphis, Metamora, Millington, Morrice, Mt. Pleasant, Perry, Saginaw, St. Clair, Sebewaing, Standish, Yale

SOUTHWEST—Albion, Allegan, Battle Creek, Benton Harbor, Blissfield, Bridgman, Brooklyn, Buchanan, Charlotte, Clinton, Coldwater, Coloma, Douglas-Saugatuck-Fennville, Dowagiac, Grand Ledge, Hastings, Hillsdale, Holt, Jackson, Jonesville, Lansing-East Lansing, Lawrence, Litchfield, Marshall, Mason, Napoleon, Niles, Paw Paw, Quincy, St. Joseph, Sister Lakes, South Haven, Sturgis, Tecumseh, Three Rivers, Union City, Vicksburg, Waldron, Wayland

SOUTHEAST—Ann Arbor, Armada, Chelsea, Davisburg, Detroit, Grosse Pointe Woods, Lake Orion, Livingston County (Brighton, Howell, Hartland, Pinckney and Fowlerville), Livonia, Milan, Monroe, New Baltimore, Pontiac, Ypsilanti

Here's good news: Michigan gains 206 MDs in 1971

A new set of figures from the Michigan Health Council reveal that during the past year Michigan gained 213 licensed physicians and 7,108 nurses.

According to the MHC's 1972 Survery of Health Manpower, licensed medical doctors increased by 206 and osteopaths by seven, for a record total of 2,124. The number of registered nurses jumped 4,728 to a record total of 45,942 and licensed practical nurses increased 2,380 to another record of 22,771.

Most Michigan counties gained one or more doctors of medicine. Major increases occurred in Genesee (17), Kalamazoo (16), Calhoun (9), Macomb (25), Ingham (18), Kent (31), Washtenaw (36) and Oakland (117). Counties with major losses included Houghton (6), Midland (6) and Wayne (102).

Michigan now has a ratio of one physician per 792 population compared to a U.S. ratio of one physician per 631 population.

Within another two or three years, says John A. Doherty, MHC executive vice president, officials are hopeful that Michigan will be gaining at least 400 to 500 licensed physicians annually.

Michigan Health Council
MD Placement Service

Breakdown of Specialty
Openings in Michigan

	Allergy	Anesthesiology	Dermatology	ENT	EENT	Family Physician	Hematology	Immunology	Industrial Medicine	Internal Medicine	Neurology	Obstetrics-Gynecology	Occupational Medicine	Ophthalmology	Orthopedics	Orthopedic Surgery	Otolaryngology	Otology	Otorhinolaryngology	Pathology	Pediatrics	Public Health	Psychiatry	Psychiatry (Child)	Radiology	Research	Rheumatology	Surgery	Thoracic Surgery	Urology
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Michigan Blue Shield sees need to support private enterprise health care

Michigan Blue Shield must concentrate some effort now on innovative techniques to enhance the more classical system of health care delivery. There are no apparent conflicts, notes John C. McCabe, Blue Shield president, since the existence of a pluralistic system is not only likely, it is desirable.

Discussing the future in the Michigan Blue Shield Annual Report, released April 10, Mr. McCabe noted that "our future plans must be predicated on an awareness that, despite promotional efforts to expand on the availability and use of alternative forms of health care delivery, widespread and immediate acceptance is unlikely."

In the event that Congress would pass a National Health Insurance Bill, said Mr. McCabe, "we see a role for the private sector using an expertise that government sorely lacks."

"We know," he noted, "numbers of claims and benefit payout will continue to increase. Benefits will also be expanded."

The annual report reflected continued growth in claims received and benefits paid in 1971.

Michigan Blue Shield received 13,385,000 claims under private, underwritten programs in 1971, a 28% increase over 1970, and represented a payout of $287.6 million, compared to $258.3 million in 1970.

The federal Medicare program relating to persons 65 years old and older received 15.4% more claims in 1971 over the previous year and payout was $65.7 million compared to $59.5 million in 1970.

The state Medicaid program experienced a 30.5% increase in claims and resulted in payout to providers of $64.6 million in 1971 compared to $44.5 million in 1970. During the same period, however, the list of people eligible for benefits increased from 597,435 to 723,217 or 22%.

Michigan Blue Shield's Cost Control Program which limited increases in physician fees and preceded the federal freeze on physician fees by seven months, resulted in a decrease of $1.1 million in fee increase requests.

Due to such cost containment efforts, coupled with rate increases granted by the state insurance commissioner, said Mr. McCabe, the company ended the year with reserves equivalent to 1.7 months of income, after beginning the year with a $4,153,500 deficit.

The improved financial situation has also resulted in a recent rate filing with the insurance bureau, which will have the effect of reducing subscription charges, effective July 1, Mr. McCabe revealed.

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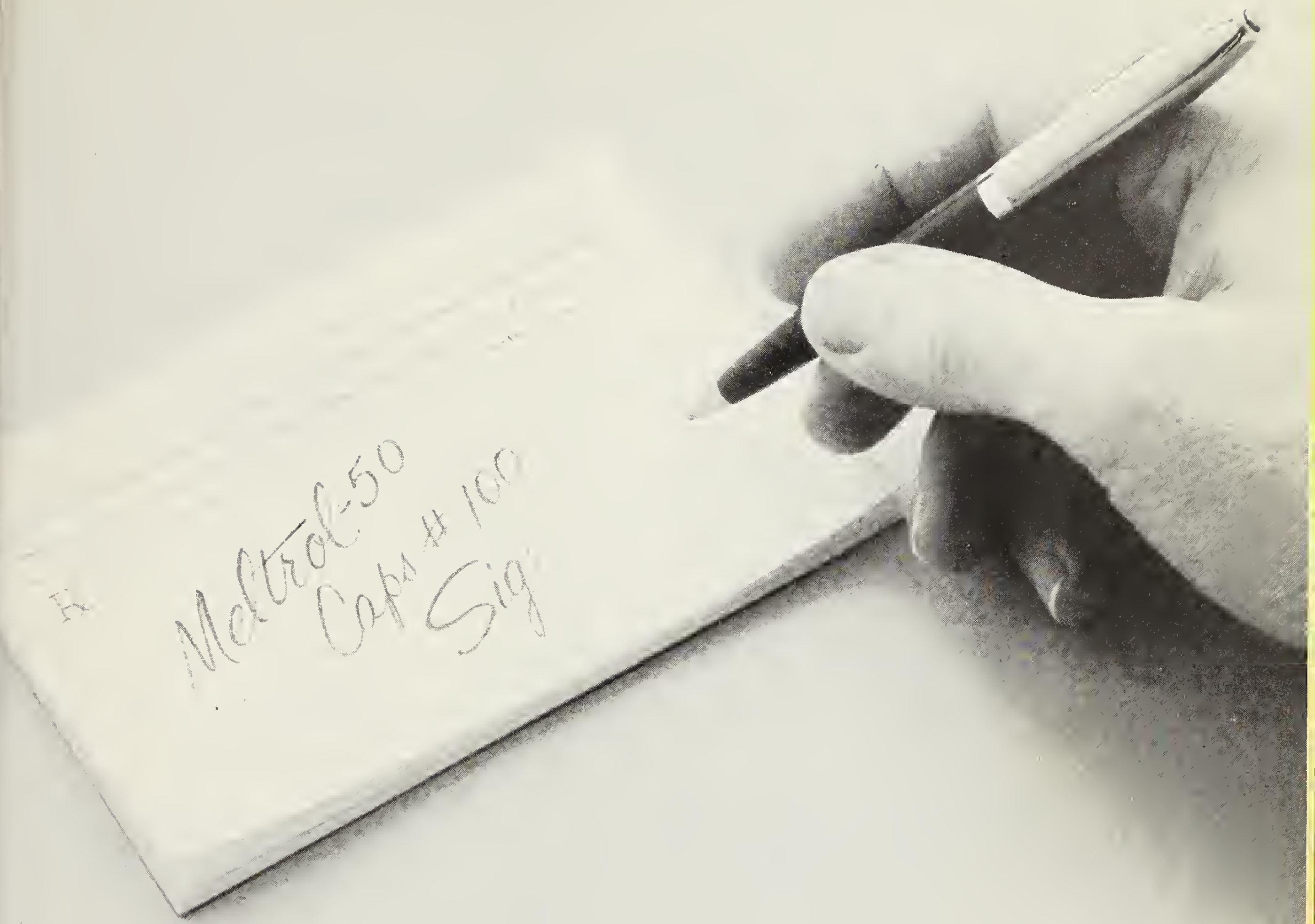

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In memoriam

Charles A. Cooper, MD
Stambaugh

Charles Arthur Cooper, MD, past president of the Dickinson-Iron and Houghton county medical societies, died Feb. 18 at the age of 65.

Doctor Cooper served as physician and surgeon for the Pickands-Mather Mining Company near Stambaugh, where he maintained a private practice, also. He retired in 1959.

Doctor Cooper was a Minnesota native and was graduated from the University of Michigan Medical School. He was affiliated with the General Hospital of the Iron River District in Stambaugh and was a member of the American Academy of General Practitioners and the industrial surgeons society.

John R. Heaton, MD
Largo, Fla.

John Richard Heaton, MD, Grand Rapids proctologist, died March 22 at the age of 59.

Doctor Heaton was affiliated with Ferguson, Droste, Ferguson Hospital in Grand Rapids. He was a graduate of the University of Illinois College of Medicine and was a past president of the Vermilion County (Illinois) Medical Society.

Doctor Heaton was a member of the Michigan State and American Proctologic Societies.

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Thomas H. Miller, MD
Detroit

Thomas Harrop Miller, MD, long-time Detroit dermatologist, died Feb. 22 at the age of 71.

Doctor Miller was on the medical staffs of Harper and Deaconess hospitals and was a consultant at Herman Kiefer Hospital before retiring in 1969. He was on the Wayne State University School of Medicine faculty from 1933 to 1965.

Doctor Miller was past president of the Detroit Dermatological Society, and belonged to the American Academy of Dermatology and Central States Dermatological Association. He was graduated from the University of Michigan Medical School.

James C. Mooney, MD
Saginaw

James C. Mooney, MD, Saginaw urologist, died March 3 at the age of 42.

Doctor Mooney, a graduate of the Marquette University medical school, was a member of the staffs of St. Mary's, St. Luke's and Saginaw General Hospitals in Saginaw. He was a member of the Amerigan College of Urology and the Saginaw Surgical Society.

Alfred A. Thompson, MD
Mt. Clemens

Alfred A. Thompson, MD, Mt. Clemens surgeon and general practitioner, died March 5 at the age of 74.

He was a past president of the Macomb County Medical Society and a member of the St. Joseph Hospital staff.

James A. Twing, MD
Lake Orion

James Arthur Twing, MD, a Lake Orion physician who had recently given up his practice to become a medical missionary in Tanzania, died in a light plane crash Jan. 23.

Doctor Twing was serving with a Seventh-day Adventist Church missionary team at Heri Hospital in Tanzania. He previously had spent six months in Tanzania in 1969.

A Vermont native, Doctor Twing was a graduate of Autonoma University medical school of Jalisco, Mexico. He had been affiliated with Wheelock Memorial Hospital in Goodrich, Pontiac General and Crittendon Hospitals in Rochester.

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LOCUM TENENS WANTED for the months of July, August and September, general practitioner, offices in hospital, excellent X-ray and laboratory facilities, summer resort area in southern Michigan. Should be equipped for emergency service. Contact: B. H. Growt, M.D., P.O. Box 128, Addison, Michigan 49220.

HEALTH DEPARTMENT DIRECTOR: Single County Health Dept. has position available on July 1, 1972 for a Director of a 63,000 population County. Fringe benefits; hospitalization; retirement program; paid vacation; sick leave; 10 annual holidays. Qualifications require an M.D. or D.O. physician; Michigan licensure. Address: Shiawassee County Health Dept., 120 E. Mack St., Corunna, Michigan 48817.

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PHYSICIAN SUMMER PLACEMENT in Beautiful Upper Peninsula. Hospital sixty (60) miles east of Mackinac Bridge is seeking a physician with Michigan license to provide partial coverage in Emergency Room during summer months. References requested with terms to be negotiated. Call or write: Helen Newberry Joy Hospital, Newberry, Michigan. (906) 293-5181, Jack Vantassel, Administrator.

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Sound Off

Doctor Masters challenges MSMS with exciting, new ideas

(Editor's Note: Following is a portion of the address made to the MSMS House of Delegates March 20 in Detroit by Brooker L. Masters, MD, Fremont, Chairman of The MSMS Council.

The speech was studied by a reference committee which reported back to the House stating in part: "Doctor Masters has reported to us his recommendations for a vigorous program for The Council of MSMS in the coming year. He has itemized concisely and articulately the areas of high priority that he feels should be emphasized. . . . This reference committee feels that these are high priority items not only for The Council but also for all practicing physicians and especially their elected representatives in the MSMS House of Delegates.")

"I believe our members and potential members are looking to us for *dynamic* leadership. Change is being suggested. Change is really being demanded, as evidenced by our willingness to discuss peer review, and such concepts as bargaining, and by our consideration of new MSMS priorities.

"Our base for a progressive future must be an informed membership. MSMS leadership must have a followship. Therefore, I recommend, and with The Council's approval, will appoint a membership committee whose primary purpose will be to promote participation in all three levels of organized medicine.

"Further, I am going to recommend to The Council that a separate Department of Membership and Member Service be created within our staff structure. Mr. Tryloff assures me that such a Department is essential to our success. Too long have we neglected the nourishment of membership. We are experimenting now with new things but they need to be coordinated with visibility, accountability, and responsibility.

"The proposed MSMS Membership Committee and Department must work in at least four major areas—recruitment of new members, orientation of those members, involvement of members on MSMS committees and in projects, and then retention of the members.

"I am certain that we must listen in new systematic ways to our members. Therefore, I suggest we create the office of a Membership ombudsman. In addition to the listening and reporting by our staff, I feel that we need a doctor who will be concerned about their needs, their complaints, their suggestions, their aspirations. I think specific responsibility must be given to an ombudsman whose responsibility will be to monitor, listen and ascertain the mood and over all desires of the membership. The ombudsman (or ambassador) would channel these views to the MSMS leadership for consideration. A field staff may be necessary to facilitate the new work of the proposed Membership Committee and ombudsman.

"As we think about our membership and efforts to make equal representation more meaningful, I recommend that this House take the initial steps to create a new Section on Academy Medicine to provide a voice for the many physicians at the three medical schools. All segments and fields of medicine, I feel, must have a voice in our policy decisions. The faculty members can make many unique contributions.

"Our future as organized medicine certainly depends too upon the medical students, who soon will graduate, enter postgraduate training, and join us in providing medical care. I recommend that the House Committee on Constitution and Bylaws consider ways that these students could be invited to join MSMS as associate members with minimal dues but eligible for our member benefits. Since

"We must be able to more effectively tell our members, the medical students and the public what MSMS believes in and stands for."

"Our base for a progressive future must be an informed membership.

only three counties have medical schools within their boundaries and because the paperwork for student memberships would be an extreme burden on these county staffs, I propose that the students be able to obtain direct membership in MSMS.

"Hand-in-hand with this, I also believe that interns and residents should be permitted to join MSMS direct. MSMS could return to the county societies any dues income now derived by the counties from interns and residents.

"We all are glad to have student delegates in our House of Delegates, to have students on various MSMS committees, and to have a new active Liaison Committee with Medical Students. Related to my concerns that students be encouraged to play larger roles in MSMS, I believe that we must involve more of our women doctors. I recommend that MSMS follow the suggestions made in Resolution 21 adopted by the AMA last year that female physicians be selected on their personal and professional qualifications, be nominated, elected and appointed to the committees and policy-making bodies of state and component societies.

"Now permit me to shift to some challenges facing MSMS.

"1. **Expansion of the medical schools.** MSMS been working effectively in this area for more than a decade and this House last fall reaffirmed our position. And I know that we are telling this story more effectively, as we all beat down the myth that doctors have kept the supply of new physicians down.

"2. **Distribution of physicians.** We know that just increasing numbers will not solve the shortages in many rural areas, some small towns, the inner cities, etc. I do not know the answers—Forced assignments? Special incentives? Satellite clinics? But I am sure that the collective wisdom of our members could develop some workable alternatives.

"3. **Area-Wide health planning.** Physicians have been urged to be more active on such planning bodies. The problems seem insurmountable. But we do know that physicians must accept leadership responsibilities to solve some of the problems. Doctors can do a great deal to help solve the conflicts in our communities, the understandable hurdles of institutional pride, etc.

"4. **Delivery of health care.** Would you please review the work of our MSMS committees and the resolutions adopted last fall, and then consider how MSMS might assume some better ways to study problems of the delivery of health care in Michigan. Many of our committees appropriately deal with internal operations. Over the years, other committees have focused on cardiac disease, maternal health, etc. Such work is part of the whole subject. How can we better study the complex problems concerning the delivery of health care to all the residents of Michigan? Send me your suggestions, please.

"5. **Health education.** What is the responsibility of individual physicians and their organizations for health education? Should MSMS conduct workshops for teachers and school counselors? Should MSMS develop study guides? Should MSMS promote the fine AMA materials? And what priority does this type of activity deserve today?

"I can easily add more challenges; and probably each of you would have a special subject to add. This short list of five challenges facing medicine today is certainly incomplete. There are solutions, but they do require the attention of all doctors—and particularly of each delegate.

"You delegates are the 'Statesmen of Medicine in Michigan.' Webster defines a statesman, as 'one who shows unusual wisdom in treating or directing great public matters.'

"As statesmen you must define our positions and chart a course.

"Repeatedly I am asked, 'What does the Michigan State Medical Society stand for?'

"How do you answer this question when it is raised by your associates?

"It is your role as delegates to identify and define the broad policies which MSMS can work for and live under. We must be able to more effectively tell our members, the medical students and the public what MSMS believes in and stands for.

"You have a good Council now and I urge you to leave the day-to-day direction up to The Council. They can make the administrative decisions based on broad policies set down by this House of Delegates.

"We must unite our forces.

"We must deal with vital issues in a positive way.

"And I know this is possible."

More accolades for Kent doctors

(This article is reprinted, with permission, from the March 12 edition of the GRAND RAPIDS PRESS.)

Private citizens occasionally complain that doctors make too much money, and the doctors occasionally complain that all the public knows about them is how much they charge. That local physicians contribute importantly to the welfare of this community without any idea of receiving monetary compensation for their efforts is a fact, we think, that is widely recognized, although not by everyone. But rarely are the doctors' contributions acknowledged in a formal way.

All of this is by way of saluting the Fraternal Order of Police for having honored 21 Grand Rapids area doctors for the time and effort they have put into the police emergency unit program. The FOP's gesture follows that of the Women's Auxiliary, the policemen's wives, in formally thanking the doctors for the same services. Perhaps no one except the policemen themselves know better how important those contributions have been than do their wives.

But in any event, we think the honoring of the doctors by both organizations was very much in order. We wish to add only that the doctors went into the program—designed and set up by them, in fact—because they saw a need and decided to remedy it. The impetus for the program came from the doctors themselves, not from the police or the community at large.

It seems pertinent to remark also that many of these same doctors, as well as many others, have donated equally important services to the Community Action Program and welfare agencies, both public and private, that don't show up on anyone's doctor bill, either the individual's or the public's.

"The American doctor . . . has no equal"

A great deal has been said about the shortcomings of American medicine. Yet rarely does a doctor take time off from his man-killing schedule to defend the performance of his profession.

It might be helpful if doctors posted on their waiting room walls the following figures compiled by the National Center for Health Statistics and the U. S. Department of Health, Education and Welfare. The figures cover the 20-year period 1949 to 1968. They show that in just 20 years advances in medical science have brought the following reductions in death rates in the U.S.: Polio nearly 100 percent; whooping cough nearly 100 percent; dysentery nearly 100 percent; syphilis 95 percent; tuberculosis 88 percent; hypertensive heart disease 78 percent; nephrosis and nephritis (kidney diseases) 76 percent; maternal mortality in childbirth 73 percent; appendicitis 72 percent; asthma 58 percent; acute rheumatic fever, chronic rheumatic heart disease 46 percent; meningitis 36 percent and infant mortality 31 percent. These figures of course barely touch the surface. They tell nothing of the advances of "nuclear medicine," advances in heart surgery, transplantation of human organs and the continuing development of wonder drugs and other breakthroughs in what has been called by a leading publication "A medical revolution."

The medical revolution could only have been possible in a land where combination of free inquiry and technology is encouraged. The American doctor with his superior skills has no equal, and the public is the chief benefactor of the freedom that produces his kind.

(This article is reprinted, with permission, from the March 2 issue of the CRAWFORD COUNTY AVALANCHE of Grayling.)

". . .a time for rolling up our sleeves and fighting. . ."

By James H. Sammons, MD, President,
Texas Medical Association

Having observed the activities of organized medicine for a number of years—and, simultaneously, having seen encroachments by government, hospitals, nonprofessional corporations, and continued apathy of many members toward these dangers—it always renews my faith in the profession to observe the dedication, the effort, and the total commitment of our colleagues who make up the membership of committees and councils of this Association.

In these times, and for the indefinite future, I am convinced that organizations of medicine must redirect their activities. Whether we like it or not, medicine must become more oriented to socioeconomics, compilation of data profiles, data banks, and computerization of activities of medicine. Furthermore, we must be willing to expand our staffs to whatever size and scope is necessary to monitor these intrusions, to disseminate this information and, yes, ultimately to be hard-nosed in negotiations for the preservation of our freedoms.

Your Association has reached this point, and requires a commitment from each of us: Not only must we lend our moral support, but we must be willing to pay the freight both physically and financially, if indeed we believe that these freedoms are worth saving.

Doctor Sammons

I suggest to you, as a colleague, that you advise your county society of your belief and of your willingness to support these efforts. The time no longer exists, it seems to me, for us to indulge in the luxury of semantics in the misguided belief that right always survives, and that our position by virtue of such rightness will prevail. Rather, it is a time when we must roll up our sleeves and fight for these rights, adopt the tactics of the opposition, and in fact be willing to out-think, outfight and outspend them.

No physician who truly values the freedom to treat his patients to the best of his ability can believe less or do less.

I know that we can count on each of you.

Unity must be the order of the day.

(Doctor Sammons' editorial from the February issue of TEXAS MEDICINE is reprinted here with permission. Doctor Sammons was in Detroit on Dec. 19 as a guest of Detroit TV interviewer Lou Gordon. The topic of discussion then was the purposes and activities of the AMA. Doctor Sammons is on the AMA Board of Trustees.)

Doctor,
have you filled out and returned
your copy of the

1972 MSMS Survey on the Overhead Costs of Medical Practice?

The survey was mailed to you about April 18, designed to assemble facts on the economics of medical practice in Michigan. These facts are used to help committees of the society, in MSMS policy deliberations and to refute allegations about levels of physicians' fees and income. The first MSMS costs study was made in 1971.

Doctor Blue Spruce says U.S. needs more minorities in health care

The patient—the nation's health manpower situation—is sick, says George Blue Spruce, DDS, director, Office of Health Manpower Opportunity, Bureau of Health Manpower Education, National Institutes of Health.

And although the "patient" shows signs of improvement, its continuing betterment depends on our willingness to continue the "treatment"—adequate funding of programs designed to bring more minorities into the health care field.

Doctor Blue Spruce, who keynoted the Great Lakes Health Manpower Conference April 12 at Michigan State University, observed that almost all Americans encounter high prices, shortages and long waiting lines in trying to obtain health care.

"But the most striking evidence that something is wrong can be seen in the plight of minorities," he said. "The less attractive inner-city and rural areas, where impoverished minorities tend to cluster, are being abandoned by health professionals who tend to concentrate in attractive, high-income districts.

"Health services are least adequate where the need is greatest," he said, citing statistics showing that non-whites in the U.S. die seven years earlier, their infants nearly twice as often, their mothers in childbirth four times more often.

"Few minority children can even think of themselves as health professionals—they have no role models," he said. Doctor Blue Spruce (a Pueblo from Santa Fe, N.M.) is himself the only full-blooded American Indian dentist in the country.

"But probably the biggest obstacle to minority students seeking careers in the health professions is money—the high cost of education and the lack of financial resources," said Doctor Blue Spruce.

For that reason, he praised the programs set up to encourage and finance minority students in the health careers—among them the task force of the AMA, the National Medical Association, the American Hospital Association and the American Association of Medical Colleges, whose long-term goal is to achieve representation of minorities in the physician population equal to the total population.

Doctor Blue Spruce finds encouragement in figures which show that Black first-year medical school students increased from four to seven percent of the total between 1969 and 1971, while the percentage of Spanish-Americans and American Indians tripled.

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ATE NEWS FROM THE MICHIGAN STATE MEDICAL SOCIETY

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Michigan Medicine
May 19, 1972, Volume 71, Number 15
Michigan State Medical Society
Reading Time: 2 Minutes, 20 Seconds

B5305 TO AUTHORIZE UNIFORM FEE SCHEDULE for Medicaid payments by the epartment of Social Services has moved into position for passage by the ichigan House of Representatives. An amendment sought by MSMS, requiring nnual review and adjustment of the schedule, was changed to "periodic" eview and adjustment and added to the bill. It now is scheduled for inal House action and then must face action in the Senate. The bill ould change the system of payments under Medicaid from "reasonable harges" to "uniform fees" and further states, "A uniform fee schedule hall be determined by the state department (social services)."

In non-legislative areas, medicine won two of three points it had sisted upon for the state-operated Medicaid fiscal operation. A sub-mmittee of medical and osteopathic physicians had recommended to the ll Medical Advisory Committee to the Medicaid program (1) use of a iform fee schedule, (2) use of the 1971 MSMS Relative Value Scale, and 3) use of the 5-digit CPT. The larger committee accepted the first two ecommendations, but opted for the 4-digit National Blue Shield coding ystem.

Substitute Resolution 6 adopted by the fall MSMS House of Delegates esolved "that the Council do everything in its power to establish a evised Medicaid payment system which would include a Uniform Fee Schedule r all services and procedures." At the spring session, the House adopted he 1971 version of RVS.

STATE SENATE APPROPRIATIONS COMMITTEE members met with constituent doctors in MSMS building May 9 to discuss various medical economic factors. Guests and physicians were Sen. Garland Lane of Flint and James Gibbons, MD, Flint; Sen. Joseph Mack of Ironwood and Donald T. Anderson, MD, Kingsford; Sen. Gary Byker of Holland and George J. Smit, MD, Holland; Sen. John Toepp of Cadillac and Charles Oppy, MD, Roscommon; Sen. Jerry Hart of Saginaw and Robert Jardinico, MD, Saginaw; and Sen. Carl Pursell of Plymouth and Ray R. Barber, MD, Plymouth. Also in attendance were Aaron K. Warren, MD, of Cassopolis, who was Doctor-of-the-week, and James H. Grove, MD, Niles, president of the Berrien County Medical Society. Main discussion centered on cost and growth of medical schools in Michigan, and how Michigan can retain more of its trained physicians. Senators urged further meetings.

SMS HAS ASKED THE AMA to investigate the credentials of the Japanese hysician who has appeared in Michigan to demonstrate acupuncture to hiropractors. The AMA and the Michigan Department of Licensing and egulation are studying acupuncture.

JOHNSON AND HIGGINS firm has requested a 90-day extension of their authorization from the MSMS Council to investigate on an exclusive basis a possible professional liability insurance program for MSMS. If the extension is granted, the firm plans to present a proposal to The Council August 4.

IN A NEW EFFORT TO PLAN public relations activities, the MSMS PR Committee has invited MSMS committee chairmen, medical specialty leaders, and others to present proposals for 1973 at a committee hearing May 24 at MSMS.

MSMS HEADQUARTERS continues as the busy hub for MSMS committees and many medical groups -- The Michigan Academy of Family Physicians Board will confer May 21; American Cancer Society Service and Rehabilitation Committe May 23; Michigan Society of Neurosurgeons, May 24; Michigan Society of Internal Medicine, June 4, etc. The Michigan Council of Specialty Societie held its regular meeting at MSMS May 17.

"FOR MANY YEARS, the Michigan State Medical Society has worked diligently for the expansion of the medical schools at Wayne, the University of Michigan and Michigan State University. Together we must work to produce more well-trained young physicians to provide quality medical care for the people of Michigan."

Those statements were part of a cooperative MSMS and Wayne County Medical Society advertisement in the Detroit News special section May 7 about the dedication of WSU Scott Hall. The ad helped implement Resolution 64 adopted by the MSMS House last fall "to inform the public of its goals of obtaining adequate numbers of well-trained physicians in Michigan." The ad reached the 700,000 subscribers of the Detroit News.

IF YOU HAVEN'T returned the 1972 MSMS Overhead Cost Study Questionnaire to MSMS as yet, please do so immediately. Early returns are being tabulated.

MORE MICHIGAN MEDICAL school graduates will remain in Michigan for their internships than last year. WSU reports that 77 of 127 graduates will remain, 49 will intern in other states, and one is undecided. MSU reports that 15 of its first graduating class of 30 will remain in Michigan and 15 will go to other states. U-M reports 82 of 190 graduates will intern in Michigan, 99 will go out of state, four will join the Armed Forces; and 5 have not completed arrangements. See July Michigan Medicine for details.

May 19, 1972 Vol. 71, No. 15

Michigan Medicine

MICHIGAN STATE MEDICAL SOCIETY

Published three times each month and four times in December and January, 38 issues, by the Michigan State Medical Society as its official journal. Second class postage paid at East Lansing, Mich. and at additional mailing offices. Yearly subscription rate, $9.00. Printed in USA. All communications should be addressed to the Publications Committee, Michigan State Medical Society, 120 West Saginaw Street, East Lansing, Michigan 48823. © 1972 Michigan State Medical Society. Phone: Area Code 517, 337-1351.

EDITOR: HERBERT A. AUER

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Michigan Medicine

May 30, 1972, Volume 71, Number 16
Michigan State Medical Society
Reading Time: 2 Minutes, 30 Seconds

HE VIEWS OF YOUNGER PHYSICIANS were solicited at a special meeting in alamazoo May 25 when MSMS President-Elect John J. Coury, MD, held an open orum with 27 doctors under 45. Doctor Coury told the March meeting of he MSMS Council and the Spring session of the House of Delegates that he ants to invite questions and suggestions from younger doctors and also rom hospital staffs; and to make a strong appeal for united profession. homas R. Berglund, MD, MSMS PR Committee chairman, presided and explained his pilot meeting was another attempt to further improve MSMS communications.

INCREASES IN PREMIUMS effective June 1 have been announced by the Medical Protective Company, which provides professional liability insurance for an estimated 4,500 MSMS members.

Increases in the five specialty classifications for physicians in Wayne, Genesee, and Oakland will range from $18 to $242 a year. In all the counties the increases will range from $36 to $325. In the three counties, the new premiums for $100,000/$300,000 will be $194 for Class I up to $2,676 for Class V. In the other counties, the new premiums will be $212 for Class I up to $1,950 for Class V.

ICHIGAN PHYSICIANS ARE reminded to take their AMA membership card with them hen they go to the AMA convention in San Francisco in June. A registration ee will be charged non-members.

"PHYSICIAN OF THE YEAR" honors were bestowed by the Detroit Medical Society and the Wolverine State Medical Society upon Charles Vincent, MD, Detroit, May 24 at the annual Clinic Day. Doctor Vincent was hailed for his medical leadership, excellent teaching, and advancement of obstetrical-gynecological science. Herman J. Glass was honored as "Citizen of the Year" for his work as a hospital administrator and community leader.

LIVINGSTON COUNTY Medical Society members will meet the MSMS staff and visit the MSMS headquarters June 6 when the society holds its monthly dinner meeting in East Lansing. Similar meetings were held this spring at the MSMS building by the nearby Eaton and Shiawassee County Medical Societies. This idea will be expanded in the fall.

IN A SURVEY of Lansing-MSU area residents re national health insurance, U.S. Rep. Charles E. Chamberlain found that more favored "a program to help meet costs of catastrophic illness" than any other alternative on the questionnaire. Respondents were asked to check one or more of six choices. These were the replies: 42% approved a program to help meet costs of catastrophic illness; 34% would require employers to provide health insurance for employees; 33% wanted additional tax credits for premiums for private insurance 27% favored a new program of health care for the poor to replace Medicaid; 26% favored complete nationalization of health insurance; and 15% urged no new legislation. Rep. Chamberlain received more than 17,000 questionnaires back.

KALAMAZOO AND HALE (in Iosco County) have been included by HEW among 122 USA urban and rural areas as medical poverty pockets qualifying for physicians assigned by the National Health Services Corps. The two Michigan requests were approved by the two component medical societies and MSMS, following guidelines adopted by the MSMS Council.

PLANS TO CONSTRUCT A WSU University Clinics Building and a new Detroit General Hospital in the new Detroit Medical Center area have been announce Construction plans and fund requests will be coordinated.

WAYS TO IMPROVE MD EFFECTIVENESS in the legislative process were discussed May 19-21 at the first Legislative Seminar held in Lansing by the Michigan Academy of Family Physicians. About 20 state legislators and state officials joined concerned Michigan family physicians. R. W. Oakes, MD, Harbor Beach, MAFP legislative chairman, was in charge.

Maurice Reizen, MD, Director, state Department of Public Health, related his personal "Do's and Don'ts" to a weekend MAFP legislation workshop. They are:

1. Be Honest! All you need is one lie to destroy your credibility with legislators.
2. Don't get so emotional you become irrational.
3. Don't threaten or bribe -- it's stupid.
4. Don't bug legislators during the social hour. He deserves the courtesy of enjoying a respite as would you.
5. Do get to know the legislator's staff -- aides, secretary, etc. They can be very valuable to you in many ways.
6. Do learn the art of compromise.
7. Do listen to your legislator.

AN OBJECTION HAS BEEN FILED by the Michigan Hospital Association to HEW Secretary Richardson's proposal that hospitals which receive Hill-Burton money must provide more free care to the poor. Such a plan "would make the paying patients the victims of this involuntary charity," MHA declares.

May 30, 1972 Vol. 71, No. 16

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Michigan Medicine

OFFICIAL JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY • VOLUME 71, NUMBER 17 • JUNE, 1972

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Michigan's 1972 medical graduates — where are they going? what are their opportunities?

See page 515 for the details.

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Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

Dosage: Individualize for maximum beneficial effect. *Adults:* Tension, anxiety and psychoneurotic states, 2 to 10 mg b.i.d. to q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; adjunctively in skeletal muscle spasm, 2 to 10 mg t.i.d. or q.i.d.; adjunctively in convulsive disorders, 2 to 10 mg b.i.d. to q.i.d. *Geriatric or debilitated patients:* 2 to 2½ mg, 1 or 2 times daily initially, increasing as needed and tolerated. (See Precautions.) *Children:* 1 to 2½ mg t.i.d. or q.i.d. initially, increasing as needed and tolerated (not for use under 6 months).

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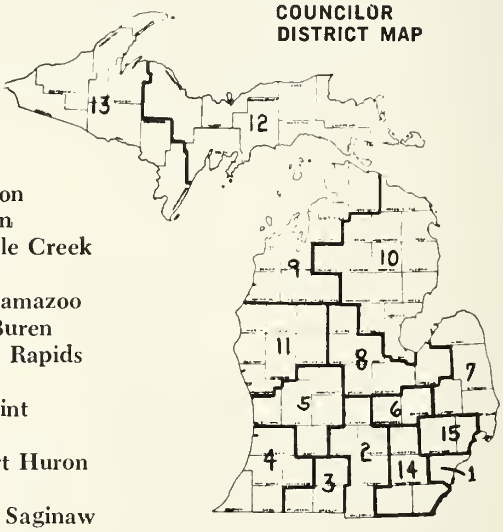
COUNCILOR DISTRICT MAP



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President's page

Sidney Adler, MD
MSMS president

I am commonly told (unfairly, of course), that I have a "short fuse." It isn't true. My accusers simply don't understand the provocations to which I am subjected.

One of the duties of the president of the society is to examine the literature which comes across his deck *virtute officii*. Two pieces, released in April, 1972, occasion this explosion.

One is the keynote address of the president of one of our national professional associations, excoriating HMOs. If I weren't so stubborn, he might even make me favor them.

They are, he says, "the product of years of heavily financed maneuvering by promoters of labor union monopoly power,"—politically motivated. And politics, we learn, "deal in deception, exaggerating problems that are best left to individuals, then promising utopia in exchange for power . . . Politics is arbitrarily cruel and unscientific." He goes on to attack, by name, many important figures in national and state government.

In heaven's name, why? The address pleads for public understanding of physicians' problems. Such intemperate attacks on those holding responsible positions in government and in the community make it much more difficult to gain that understanding. I don't like HMOs, but this kind of stuff upsets my digestion.

The second is a report on a regional medical program conducted by a nonprofit educational institution, with government money. Its annual budget exceeds $200,000. Existing mechanisms for "production and distribution of health services in most large cities," are inadequate, it says, because of "highly bureaucratic, political and administrative environments, unimaginative management of the urban machinery and rapid social and economic transformation"; it then tells why its full-time staff of seven, and parttime staff of another seven, can overcome the shortcomings of government.

Nonsense! Like many Americans, I mistrust big government, but I mistrust even more the assumption of our educational institutions that their personnel provide an intellectual elite capable of and entitled to supersede elected officials in supplying governmental functions.

There is a renaissance in the manner in which we practice medicine. The distribution and delivery of health care is changing. Some advocate trade unionism and collective bargaining in our profession. The greater the federal involvement, the greater the controls. Consumers demand more participation or they will gain it through legislation.

Experimentation in health care and health care facilities is the order of the day. Money alone will not solve the medical problem.

These two organizations come at us from opposite poles, but they pose equally serious threats to our society. We must recognize and resist those threats even if we can sympathize, philosophically, with those who pose them. Our problems cannot be solved either by anarchy or by elitism; we must scorn them.

If we won't support our government and our society, who will?

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Publication of **Michigan Medicine** is under the direction of the Publication Committee, Michigan State Medical Society. The scientific editor is responsible for the scientific content. The managing editor is responsible for the production, correspondence and contents of the journal. He and the executive editor share final responsibility of the entire publication.

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1. Address scientific manuscripts to the Publication Committee, Michigan State Medical Society, 120 West Saginaw Street, East Lansing, Michigan 48823. Submit original, double-spaced typewritten copy and two carbon copies or photo copies on letter size (8½ x 11 inch) paper. On page one, include title, authors, degrees, academic titles, and any institutional or other credits.

2. Authors are responsible for all statements, methods, and conclusions. These may or may not be in harmony with the views of the Editorial Staff. It is hoped that authors may have as wide a latitude as space available and general policy will permit. The Publication Committee expressly reserves the right to alter or reject any manuscript, or any contribution, whether solicited or not.

3. Illustrations should be submitted in the form of glossy prints or original sketches from which reproductions will be made by Michigan Medicine.

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6. The editors welcome, and will consider for publication, letters containing information of interest to Michigan physicians, or presenting constructive comment on current controversial issues. News items and notes are welcome.

7. It is understood that material is submitted for exclusive publication in Michigan Medicine.

MICHIGAN MEDICINE is the official organ of the Michigan State Medical Society, published under the direction of the Publication Committee. Published three times a month, except four times in December and January, 38 issues, by the Michigan State Medical Society as its official journal. Second class postage paid at East Lansing, Mich. and at additional mailing offices. Yearly subscription rate, $9.00; single copies, 80 cents. Additional postage: Canada, $1.00 per year; Pan-American Union, $2.50 per year; Foreign, $2.50 per year. Printed in USA. All communications relative to manuscripts, advertising, news, exchanges, etc., should be addressed to Judith Marr, Michigan State Medical Society, 120 West Saginaw Street, East Lansing, Michigan 48823. Phone Area Code 517, 337-1351.

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Contraindications: Children 14 years or less; senile patients; history or symptoms of G.I. inflammation or ulceration including severe, recurrent or persistent dyspepsia; history or presence of drug allergy; blood dyscrasias; renal, hepatic or cardiac dysfunction; hypertension; thyroid disease; systemic edema; stomatitis and salivary gland enlargement due to the drug; polymyalgia rheumatica and temporal arteritis; patients receiving other potent chemotherapeutic agents, or long-term anticoagulant therapy.

Warnings: Age, weight, dosage, duration of therapy, existence of concomitant diseases, and concurrent potent chemotherapy affect incidence of toxic reactions. Carefully instruct and observe the individual patient, especially the aging (forty years and over) who have increased susceptibility to the toxicity of the drug. Use lowest effective dosage. Weigh initially unpredictable benefits against potential risk of severe, even fatal, reactions. The disease condition itself is unaltered by the drug. Use with caution in first trimester of pregnancy and in nursing mothers. Drug may appear in cord blood and breast milk. Serious, even fatal, blood dyscrasias, including aplastic anemia, may occur suddenly despite regular hemograms, and may become manifest days or weeks after cessation of drug. Any significant change in total white count, relative decrease in granulocytes, appearance of immature forms, or fall in hematocrit should signal immediate cessation of therapy and complete hematologic investigation. Unexplained bleeding involving CNS, adrenals, and G.I. tract has occurred. The drug may potentiate action of insulin, sulfonylurea, and sulfonamide-type agents. Carefully observe patients taking these agents. Nontoxic and toxic goiters and myxedema have been reported (the drug reduces iodine uptake by the thyroid). Blurred vision can be a significant toxic symptom worthy of a complete ophthalmological examination. Swelling of ankles or face in patients under sixty may be prevented by reducing dosage. If edema occurs in patients over sixty, discontinue drug.

Precautions: The following should be accomplished at regular intervals: Careful detailed history for disease being treated and detection of earliest signs of adverse reactions; complete physical examination including check of patient's weight; complete weekly (especially for the aging) or an every two week blood check; pertinent laboratory studies. Caution patients about participating in activity requiring alertness and coordination, as driving a car, etc. Cases of leukemia have been reported in patients with a history of short- and long-term therapy. The majority of these patients were over forty. Remember that arthritic-type pains can be the presenting symptom of leukemia.

Adverse Reactions: This is a potent drug; its misuse can lead to serious results. Review detailed information before beginning therapy. Ulcerative esophagitis, acute and reactivated gastric and duodenal ulcer with perforation and hemorrhage, ulceration and perforation of large bowel, occult G.I. bleeding with anemia, gastritis, epigastric pain, hematemesis, dyspepsia, nausea, vomiting and diarrhea, abdominal distention, agranulocytosis, aplastic anemia, hemolytic anemia, anemia due to blood loss including occult G.I. bleeding, thrombocytopenia, pancytopenia, leukemia, leukopenia, bone marrow depression, sodium and chloride retention, water retention and edema, plasma dilution, respiratory alkalosis, metabolic acidosis, fatal and nonfatal hepatitis (cholestasis may or may not be prominent), petechiae, purpura without thrombocytopenia, toxic pruritus, erythema nodosum, erythema multiforme, Stevens-Johnson syndrome, Lyell's syndrome (toxic necrotizing epidermolysis), exfoliative dermatitis, serum sickness, hypersensitivity angiitis (polyarteritis), anaphylactic shock, urticaria, arthralgia, fever, rashes (all allergic reactions require prompt and permanent withdrawal of the drug), proteinuria, hematuria, oliguria, anuria, renal failure with azotemia, glomerulonephritis, acute tubular necrosis, nephrotic syndrome, bilateral renal cortical necrosis, renal stones, ureteral obstruction with uric acid crystals due to uricosuric action of drug, impaired renal function, cardiac decompensation, hypertension, pericarditis, diffuse interstitial myocarditis with muscle necrosis, perivascular granulomata, aggravation of temporal arteritis in patients with polymyalgia rheumatica, optic neuritis, blurred vision, retinal hemorrhage, toxic amblyopia, retinal detachment, hearing loss, hyperglycemia, thyroid hyperplasia, toxic goiter association of hyperthyroidism and hypothyroidism (causal relationship not established), agitation, confusional states, lethargy; CNS reactions associated with overdosage, including convulsions, euphoria, psychosis, depression, headaches, hallucinations, giddiness, vertigo, coma, hyperventilation, insomnia; ulcerative stomatitis, salivary gland enlargement.
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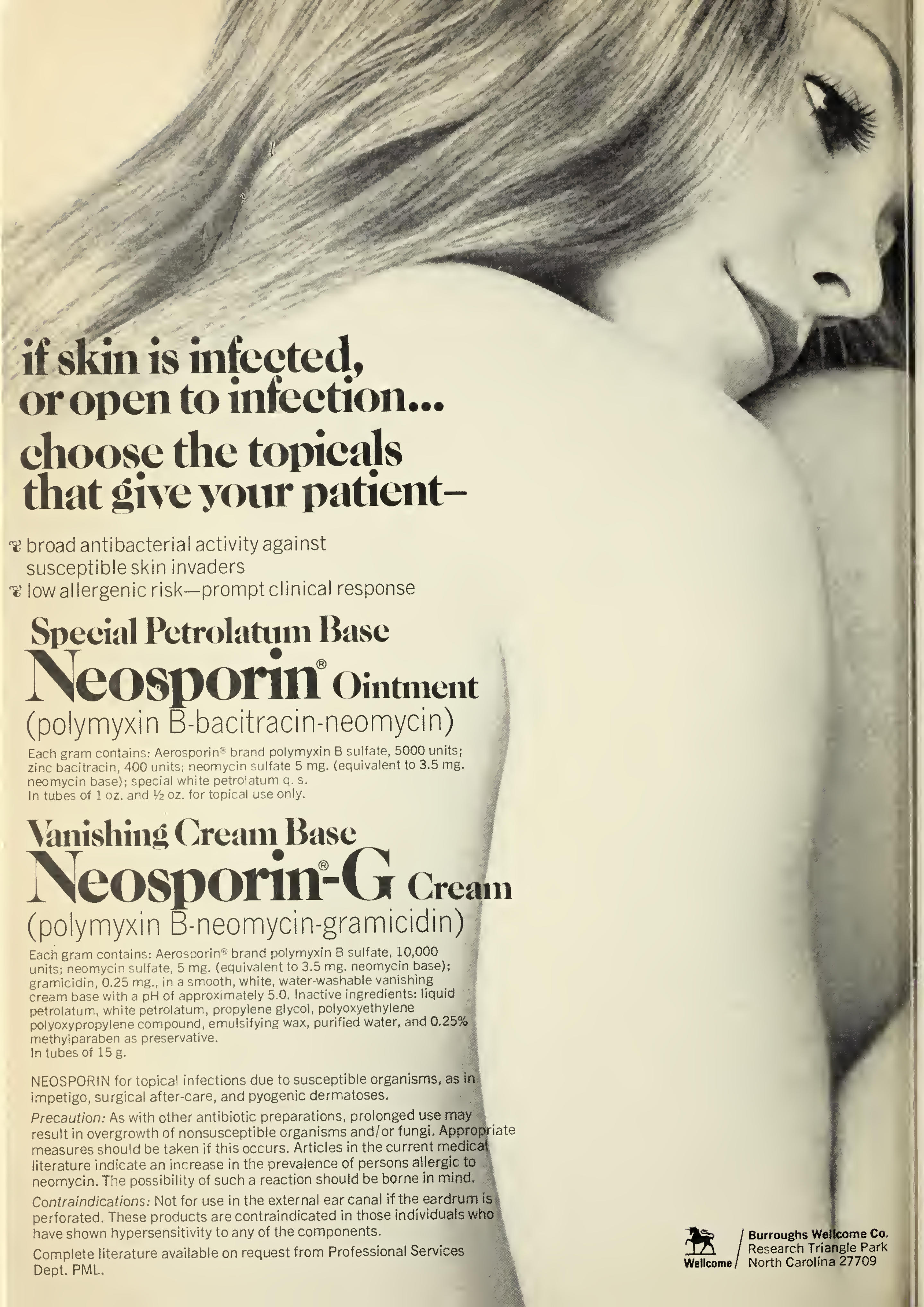

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Complete literature available on request from Professional Services Dept. PML.

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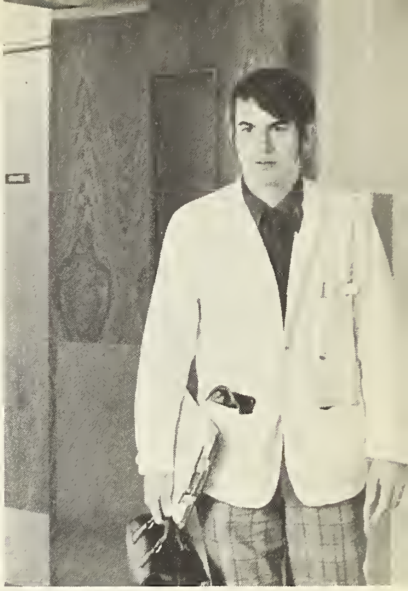
The following statistical information about internships and residencies in Michigan and the nation is the latest. The 1971 information has not been released as yet, and the 1972 medical school graduates are just now beginning their internship programs.

This information is from the most recent Annual Report of the American Medical Association Council on Medical Education.

Considerable interest is being shown in such figures by the MSMS House of Delegates, the Michigan legislature, and others.

The MSMS House authorized the appointment of a committee to study why Michigan graduates go to other states for internships and residencies and to report to The MSMS Council and 1972 House. Speaker Vernon V. Bass, MD, has asked the Liaison Committee with Medical Students and the Education Liaison Committee to work together as a task force to make the study. Two meetings have been held already and considerable research is underway.

The following statistical reports as of Sept. 1, 1970 provide information about the 1970 graduates of the medical schools in Michigan and the nation:



A member of the first graduating class from the MSU College of Human Medicine, Richard E. Hodgman, MD, of Bangor now joins the ranks of Michigan interns.

How does Michigan rank in internship-residency programs?

AMA figures tell:

Michigan offered 627 positions as of Sept. 1, 1970 at 43 hospitals for the sixth largest number of internships in the nation.

Michigan, with 464 positions filled, had the eighth largest number of interns in the USA.

The Michigan batting percentage of 74% of positions filled ranks well with the bigger states. New York had 2,014 of 2,433 positions filled for 83%. California had 1,264 of 1,443 positions filled for 88%.

Pennsylvania had 786 of 1,131 positions filled for 69%. Illinois had 749 of 1,026 filled for 73%. Ohio had 634 of 943 filled for 67%. Texas had 474 of 621 filled for 76%. Massachusetts had 511 of 575 filled for 89%, the best of the states with the larger number of internships. Some of the smaller states with 30 or fewer positions fared better than Massachusetts' 89%.

There were 319 graduates of U-M and WSU as interns in the USA in 1970.

The University of Michigan led all other medical schools in the number of interns and residents in the USA as of Dec. 31, 1970 with 190 interns and 649 residents for a total of 839.

The Faculty of Medicine and Surgery, University of Santo Tomes, Manila, led all foreign schools with 129 interns and 1,251 residents for a total of 1,380 in the USA; far above the 579 total from the Institute of Medicine, Far Eastern University, also at Manila.

In Michigan there were 17 women in internships as of Sept. 1, 1970 from US and Canadian schools.

In Michigan there were 7 black interns as of Sept. 1, 1970 and 30 in residencies.

There were 36 osteopaths serving on hospital attending staffs in 14 hospitals as of Sept. 1, 1970. In the nation there were 53 hospitals with 117 osteopaths on attending staffs as of Sept. 1, 1970, a gain from 11 hospitals with 23 osteopaths on duty in 1969.

In Michigan in 1970 there was a total of 88 AMA-approved paramedical education programs. The largest numbers were 38 to train medical technologists, and 33 for radiologic technologists.

Michigan reported a total of 46 directors of medical education, with 30 full-time, salaried; 12 part-time salaried; 2 full-time non-salaried, and 2 part-time non-salaried. In the nation there were 908 with 580 full-time salaried. The specialty of internal medicine contributed the largest single group with 34 percent of the total.

Doctor Hodgman and another MSU graduate, Marshall S. Spencer, MD, Port Huron, check in at the nurses station in the Cardiac Care Unit at Sparrow Hospital, Lansing. Doctor Hodgman will remain in Lansing to intern, while Doctor Spencer will continue his training in New York.

MICHIGAN INTERNSHIPS/Continued

Origin of Medical Education of Interns in Michigan 9/1/70

296 from US or Canadian schools
168 from foreign schools
464 total in state

Michigan Internships

43	Number of hospitals
181	Number of approved internship programs
627	Total positions offered 9/1/70*
464	Total positions filled 9/1/70**
163	Positions vacant 9/1/70
74%	Percent filled***
296	Interns, graduates of US, Canada 9/1/70
68	Interns, foreign graduates 9/1/70
36%	Percent foreign filled
664	Total Internship positions offered in affiliated and non-affiliated hospitals 1972-73

---

*The 627 positions in Michigan ranked sixth in the nation behind New York, California, Pennsylvania, Illinois and Ohio, in that order. Texas was a close seventh with 621.

**The 464 Michigan positions filled ranks eighth in the nation behind New York, California, Pennsylvania, Illinois, Ohio, Massachusetts, and Texas, in that order.

***In the nation, 75% of the total of 15,354 positions offered or 11,552 positions were filled as of Sept. 1, 1970.

Michigan Residencies

66	Number of hospitals
192	Number of approved residency programs
2,072	Total positions offered 9/1/70*
1,714	Total positions filled 9/1/70
358	Positions vacant 9/1/70
83%	Percent filled**
922	Residents, graduates of US, Canada 9/1/70
792	Residents foreign graduates 9/1/70
46%	Percent foreign filled
2,299	Total Residency positions offered 1972-73

---

*The 2,072 positions in Michigan ranked sixth in the nation behind New York, California, Pennsylvania, Illinois, Ohio, in that order.

**In the nation, 88% of the total number of 46,005 places offered or 39,220 positions were filled as of Sept. 1, 1970.

Here are 1972 results for Michigan students in intern matching

Officials at Michigan's three medical schools report they are "generally pleased" with the results of the 1972 National Intern-Resident Matching Program.

At the University of Michigan, 121 of the 190 young doctors in this year's graduating class received internships or residencies at their first-choice training hospitals, an even higher proportion than last year.

Wayne State medical graduates total 127 this year, and of them, 89 received their first choice in the internship matching program.

And at Michigan State, where the College of Human Medicine is graduating its first class of seniors, 23 of the 30 graduates were selected by their first choices in the national computerized program in which they list their preferences.

Thirty-five of the U-M graduates received their second choice of hospital, and an additional 14 received their third choice.

Eighty-two U-M graduates will serve first-year internships or residencies in Michigan hospitals, while 99 will go out of state and four will intern in the Armed Forces. Fifty-five of the class chose rotating internships, while 130 chose straight internships.

The U-M graduates chose specialties in the following numbers: internal medicine—47; surgery—34; pediatrics—12; family medicine—11; obstetrics and gynecology—10; pathology—6; psychiatry—6; anesthesiology—2; urology—1; physical medicine and rehabilitation—1.

Seventy-seven of the WSU School of Medicine graduates are planning to intern in Michigan, for a percentage of over 60%, the highest of all the medical schools. The percentage of U-M graduates staying in Michigan is 43%, while the MSU percentage is 50%.

Forty-nine WSU medical graduates are going out-of-state.

Three-quarters of the MSU class will be remaining in the Great Lakes area for internships and exactly half will remain in Michigan. Ten of the students will be interning in community hospitals in which they trained.

"When a first class is being trained in innovative ways, it is not possible to know how well they will be accepted," remarks James Conklin, PhD, associate dean for student affairs in the MSU medical school. "Results of the intern matching give us added confidence that we have been doing the right things and that our students are well received."

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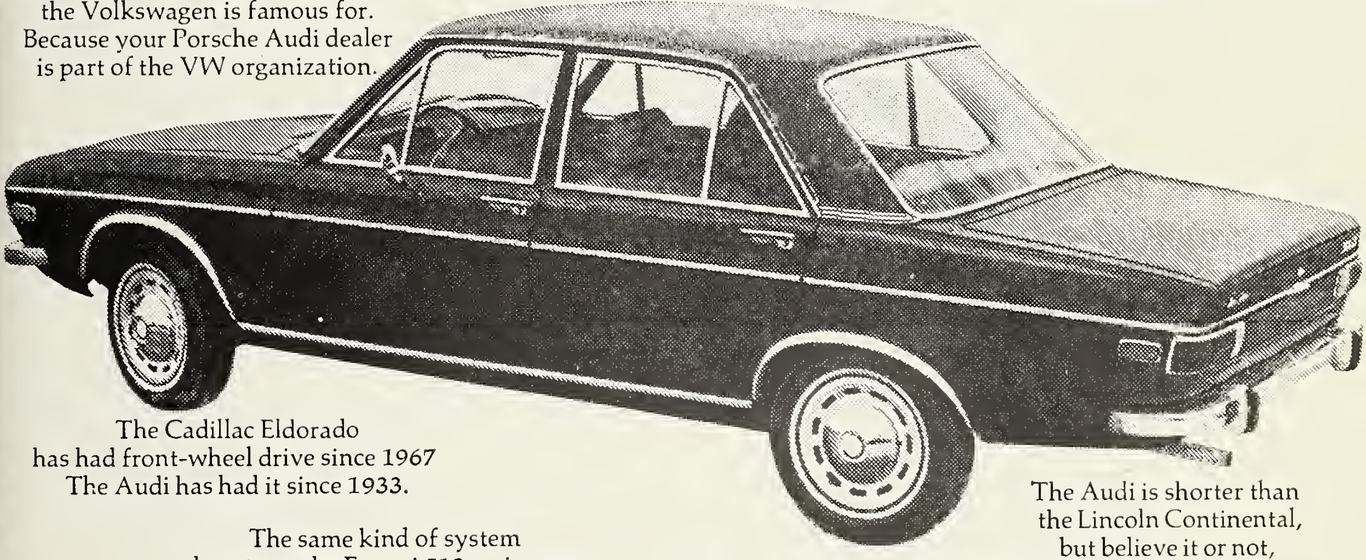

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Health Manpower Week, 1972

An immunology exhibit was staffed by medical technology students.

The first annual Health Manpower Week in Michigan began with a highly successful Health Careers Day at Michigan State University, pictured on this page. Sponsors were the MSU Organization of Health Profession Students, and the Michigan Health Council.

Over 5,000 high school students, counselors, parents and others toured the MSU medical education facilities, including colleges and departments of dietetics, health education, medical technology, medicine, music therapy, nursing, osteopathic medicine, social work, speech and hearing, psychology and veterinary medicine.

Other events of the week, proclaimed officially by Lt. Gov. James H. Brickley, included the Great Lakes Health Manpower Conference in East Lansing, and the Metropolitan Detroit Science and Career Fair at Cobo Hall. Over 120,000 Detroit-area students and counselors viewed exhibits arranged by the Michigan Health Council there.

Some fabulous charting on the polygraph drew smiles from nursing student Sue Schlosser and Howard Brody, first-year student in the College of Human Medicine, who was in charge of all exhibits in the MSU Life Sciences Building.

Lt. Gov. James Brickley officially proclaims Health Manpower Week in Michigan. From left, standing, are David Black, veterinary medicine student; Sue Schlosser, MSU nursing student; Robert Schuetz, PhD, director, MSU Institute of Biology and Medicine; Robert Trepp, MSU osteopathic student; Howard Brody, MSU medical student; John A. Doherty, executive vice president, Michigan Health Council.

Advertisement

> *"The history of science, and in particular the history of medicine . . . is . . . the history of man's reactions to the truth, the history of the gradual revelation of truth, the history of the gradual liberation of our minds from darkness and prejudice."*
>
> *–George Sarton, from "The History of Medicine Versus the History of Art"*

Would it be useful in clinical practice to have government predetermine drugs of choice?

Opinion

Results of a survey of physicians:

13.3%
Yes, it would be useful.

86.7%
No, it would not be useful.

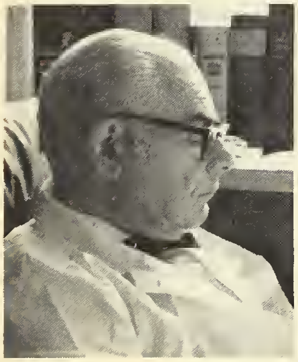
Opinion & Dialogue

Dialogue

Would it be useful in clinical practice to have government predetermine drugs of choice?

Doctor of Medicine

Walter Modell, M.D.,
Professor of Pharmacology,
Cornell University
Medical College,
Editor,
Clinical Pharmacology
& Therapeutics,
Drugs of Choice,
Rational Drug Therapy



The proposition that government should determine one or two "drugs of choice" within a given therapeutic class reflects the belief that a similarity in molecular structure insures a close similarity in pharmacologic effect. But this is by no means the rule. An obvious example would be in the field of diuretics, where a small change in chemical structure accounts for substantial differences in concomitant effects such as potassium excretion.

Any attempt to dictate the "drug of choice" would be complicated by the fact that some populations demonstrate a bimodal distribution in their reaction to drugs. If the data on drug response are mixed for the total population, one drug will appear to be as useful as the other. But if drug response is reported separately for different segments of the population, drug A will be found to be better for one group and drug B for the other.

It may, of course, be possible to determine drugs of choice in particular categories on a broad statistical basis. But there are always certain patients in whom a drug produces odd, unpredictable or idiosyncratic reactions. So, though a drug might statistically be the most useful one in a given situation, individual variations in response might make it the *incorrect* one.

The point I wish to make is that if two, three, four or more drugs in one class are of approximately equal merit, that in itself is justification for their availability. Exceptional cases do arise in which one drug would be useful to a certain segment of the population and another drug would be of no use at all. In the practice of medicine, the physician must be prepared to treat the routine as well as the unusual case.

Another objection to the determination of a drug of choice is that precise statements of *relative* efficacy are very difficult to make—much more difficult than statements of efficacy. For example, in testing drug efficacy, it is easy to determine the difference between a drug that is effective in treating a condition and one that is not at all effective. Thus, it is fairly easy to determine whether a drug is more effective than a placebo. But if you compare one drug that is effective with another drug that is also effective, and the relative differences between them are very slight, statements of relative efficacy may be very difficult to make with assurance.

I do not mean to imply that relative efficacy statements are not useful or can never be made. With some groups of drugs (e.g., analgesics), extensive study and precise methodology have yielded useful information on relative efficacy. But in most situations, such information can be acquired only through studies encompassing three to five years of use in many more patients than are used to compare drugs with a placebo for the introduction of a drug into commerce. It is really only after practitioners use a drug extensively that relative safety and efficacy in practice can really be determined.

The Bureau of Drugs has suggested the package insert as a possible means of communicating information on relative efficacy of drugs to the physician. I find this objectionable, since I do not believe the physician should have to rely on this source for final scientific truth. There is also a practical objection: Since few physicians actually dispense drugs, they seldom see the package insert. In any event, I would maintain that the physician should know what drug he wants and why without depending on the government or the manufacturer to tell him.

Undoubtedly, physicians are swamped by excessive numbers of drugs in some therapeutic categories. And I am well aware that many drugs within such categories could be eliminated without any loss, or perhaps even some profit, to the practice of medicine. But, in my opinion, neither the FDA nor any other single group has the expertise and the wisdom necessary to determine the one "drug of choice" in all areas of medical practice.

Maker of Medicine

nneth G. Kohlstaedt, M.D.,
Vice President,
Medical Research,
Eli Lilly and Company

In my opinion, it is not
function of any govern-
nt or private regulatory
ncy to designate a "drug
choice." This determina-
n should be made by the
ysician after he has re-
ved full information on
properties of a drug,
d then it will be based on
experience with this
ıg and his knowledge of
individual patient who
seeking treatment.

If an evaluation of com-
rative efficacy were to be
de, particularly by gov-
ment, at the time a new
ıg is being approved for
rketing, it would be a
eat disservice to medi-
e and thus to the patient
he consumer. For exam-
, when a new therapeu-
agent is introduced, on
basis of limited knowl-
ge, it may be considered
be more potent, more
ective, or safer than
oducts already on the
rket. Conceivably, at
s time the new drug
ıld be labeled "the drug
choice." But as addi-
nal clinical experience is
umulated, new evidence
ıy become available.
ter, it may be apparent
that the established products should not be so easily dismissed.

Variation in patient response to drugs constitutes one of the major obstacles to the determination of "drugs of choice." We are just beginning to open the door on pharmacogenetics, but it is evident that genetic differences cause wide variations in the way drugs are absorbed, metabolized, etc. This fact alone is sufficient to make unrealistic the idea that there is one drug in each class to be used for every human being.

The problem of determining relative drug efficacy is an extremely complicated one. Comparison with other drugs of the same class should not be a prerequisite for marketing a new substance. In some therapeutic areas, it may be difficult to make accurate comparisons. For example, in the treatment of infections it is not possible to conduct crossover studies. Recovery may be influenced by factors which cannot be controlled or measured, i.e., natural host resistance and virulence of infective agents. A drug's acceptability must often be judged on the basis of its own performance, and this may be limited to experience in a relatively small patient population. If the introduction of a new drug must await the adequate establishment of relative efficacy, the duration of clinical trial and extent of studies would be greatly prolonged, particularly for rare or unusual conditions. The availability of a new drug would be delayed. Many patients might suffer needlessly and lives might be lost.

Relative efficacy can best be established by experience in a general patient population through regular channels of clinical practice. The physician considers the patient as a whole, which means the patient often has multiple problems and drugs must be selected with this in mind. Hence, a "drug of choice" in an uncomplicated case may not be the best drug for a patient with associated problems. Publication of well-controlled studies in medical journals may provide comparative evidence; discussions at medical meetings, presentations at postgraduate courses, and the new audiovisual technology may bring evidence to physicians on comparative therapy. In a free medical marketplace, a drug that does not measure up will fall into disuse. For example, broad clinical experience has established vitamin B_{12} as the "drug of choice" for the treatment of primary pernicious anemia. No amount of advertising or promotional effort by the manufacturer could increase the use of liver extract for this anemia. However, a physician may wish to employ parenteral liver preparations for a special purpose.

In the field of surgery, peer review in the hospital has brought significant improvement in the use of new techniques and procedures. Something of this nature would be useful in the area of drug therapy. However, it should be developed by the medical profession itself and would necessitate, for its proper function, an improvement in the dissemination of reliable data on clinical pharmacology of drugs under consideration.

Ideally, information on the relative efficacy of drugs should be gathered and assessed by the physicians who actually administer the specific agents to a specific patient population. To do this, they will need even more information on the drugs they use – information that the pharmaceutical manufacturers must begin to provide if government regulation of *"drugs of choice"* is to be avoided.

Opinion & Dialogue

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Aseptic meningitis associated with echo virus type 3: an outbreak in Flint

By Fikria Elamrousy Hassan, MD, PhD
Flint

The ECHO viruses were first implicated as a cause of aseptic meningitis in the mid 1950's.[13] Since then, several reports of the association of ECHO virus, types four,[3] six,[4,11] nine,[1,2,7,17,18] and eleven[6,16] with the epidemic form of this disease have appeared. ECHO virus type three is known at present to be capable of producing sporadic cases of aseptic meningitis. The present report describes an outbreak of aseptic meningitis due to ECHO virus type three, which occurred in Flint, Michigan during the summer of 1970.

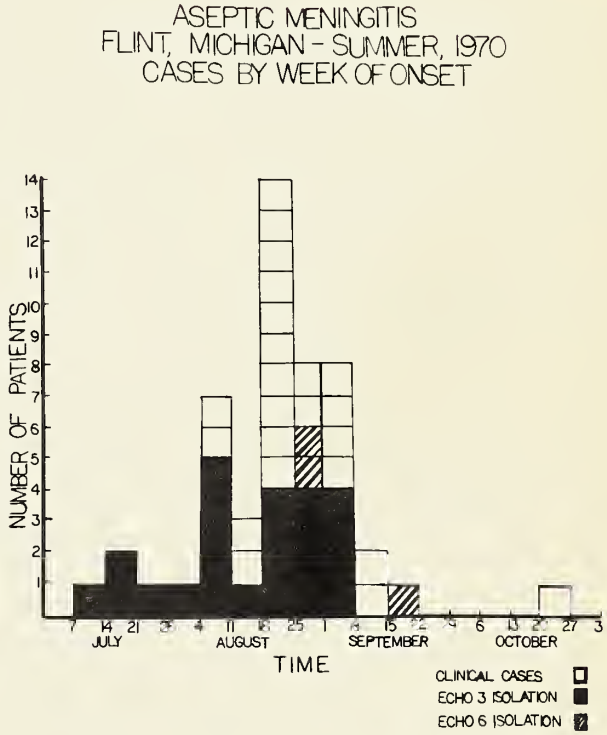
Materials and Methods

Study Group

During the summer of 1970 we received in the research laboratory at the Mott Children's Health Center, specimens from 49 patients with the diagnosis of aseptic meningitis. All patients were hospitalized at Hurley Hospital, Flint, Michigan. We reviewed in retrospect the clinical records of 47 of these patients. History. clinical findings, and laboratory data were tabulated, analyzed, and correlated with virus isolation studies.

Virus Isolations

Specimens for virus isolations were obtained from 49 patients. A total of 29 rectal swabs, 34 throat swabs, 37 cerebrospinal fluid (CSF) specimens, and five paired sera were obtained. Specimens were inoculated into three cell culture tubes from the following cell culture systems: primary human embryonic kidney (HEK), a continuous cell line Hep-2, and human embryonic lung fibroblasts (HEL). They were then observed for cytopathic effect for eight to 15 days at which time, if negative, a second passage was performed. Fluids from tubes showing definite or questionable CPE were used for subculture and the harvest was used for virus typing. Virus titration was done by the Reed-Muench method[15] and 100 $TCID_{50}$ were used for neutralization against antisera pools, and subsequently against type specific antisera. Homotypic neutralization tests with paired sera were performed using 100 $TCID_{50}$ of a local strain of ECHO virus type three. Confirmation of virus identification and antibody determination was done at the Virology Division of the State of Michigan Public Health Laboratory.



Results

Occurrence of Illness

Specimens from 49 patients with the diagnosis of aseptic meningitis were received from July through October, 1970. The epidemic curve based

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Doctor Hassan is director of laboratories at the Mott Children's Health Center. She also is a consultant in infectious diseases at Hurley Hospital, Flint.

on the date of admission is depicted in **Figure 1**. The peak of the epidemic occurred during August and the first week of September. Only one case was received in October.

The age distribution (**Table 1**) showed that the disease occurred predominantly in children. Eighty-eight percent of patients were children under 15 years of age. Forty-three percent were less than one year old; this included three infants in their second and third weeks of life.

Breakdown by race and sex (**Table 2**) showed that the epidemic occurred more in whites (32:15). Taking all age groups together, males were equally affected as females in the whites, with a slight increased incidence in females of the nonwhite group. However, in infants less than one year old, the number of females affected was more than double that of males in the same age group.

Clinical Findings

Clinical data were available on 47 of the 49 patients studied for virus isolation. The composite clinical picture is summarized in **Table 3**. Fever (101°F. or more) was present in 83% of patients. Headache (43%), stiff neck (49%), nausea and vomiting (60%), were other cardinal features of the disease. Symptoms related to the G.I. tract were present in 10 patients from whom the virus was recovered. This consisted of diarrhea in four patients, abdominal pain in another four, and abdominal distension in two patients. One patient presented with seizures, and 14 had upper respiratory infection. Rash was reported only in one case.

Laboratory Results

Table 4 summarizes the laboratory data available for the 47 patients in the study. Peripheral white blood counts were performed on 46 cases. Although the majority (48%) had less than 10,000/cu.mm. there was a significant portion (13%) with counts above 15,000 and (9%) with counts of 20,000 and above. The remainder (30%) were in the 10,000-15,000/cu.mm. range.

Lumbar punctures were performed on all 47 patients (**Table 4**). Although 47% had CSF leucocyte counts of less than 100/cu.mm., 38% had counts greater than 100, four individuals had counts greater than 500, one had a count of more than 1,000 and two had counts more than 2,000/cu.mm. Similarly, although mononuclear cells predominated in the CSF in most cases (**Table 4**), about one third (16/47) of the patients had greater than 60% polymorphonuclear leukocytes on their initial spinal fluid examination. There were 18 of the 47 cases with CSF protein of more than 50 mgs% and one case with CSF protein of more than 100 mgs%. Of the 46 CSF glucose determinations, 5 (11%) were below 50 mgs% (**Table 4**).

Table 1

Aseptic, Meningitis
Flint, Michigan—Summer, 1970

Cases by Age

Age group (years)	Number	Percent of Total*
less than 1	20	43
1 - 5	10	21
6 - 10	6	13
11 - 15	5	11
16 - 20	3	6
21 - 29	1	2
30 - 39	2	4
	47	100

*Fractions are approximated

Table 2

Aseptic Meningitis
Flint, Michigan—Summer, 1970

Age, Sex, and Race Distribution

Age Group	White		Non White	
	Male	Female	Male	Female
less than one year	3	9	3	5
1 - 5	3	2	2	3
6 - 10	3	2	—	1
11 - 15	2	2	1	—
16 - 20	3	—	—	—
21 - 29	1	—	—	—
30 - 39	1	1	—	—
Total	16	16	6	9

Table 3

Aseptic Meningitis
Flint, Michigan—Summer, 1970

Clinical Syndrome—47 Patients

	Number	Percent
Fever	39	83
Headache	20	43
Stiff neck	23	49
Nausea and vomiting	28	60
G.I. symptoms	10	21
Upper respiratory infection	14	30
Seizures	1	2
Rash	1	2

Table 4

Aseptic Meningitis
Flint, Michigan—Summer, 1970

Routine Laboratory Data

Peripheral White Blood Cell Counts—46 Patients

WBC per mm³	5,000-9,999	10,000-14,999	15,000-19,999	20,000+	Total
No. of cases	22	14	6	4	46
% of total	48	30	13	9	100%

Cerebrospinal Fluid Pleocytosis—47 Patients

WBC per mm³	0-99	100-499	500-999	1000-1999	2000+	Total
No. of cases	22	18	4	1	2	47
% of total	47	38	9	2	4	100%

Percentage of Polymorphonuclears in CSF—47 Patients

Percent interval	0-9	10-19	20-29	30-49	50-69	70-100	Total
No. of cases	8	4	1	7*	11**	16	47
% of total	17	9	2	15	23	34	100%

Cerebrospinal Fluid Protein—47 Patients

mg%	0-49	50-99	100-149	150+	Total
No. of cases	27	18	1	1	47
% of total	58	38	2	2	100%

Cerebrospinal Fluid Glucose—46 Patients

mg%	0-49	50-99	100-150	Total
No. of cases	5	40	1	46
% of total	11	87	2	100%

*one case with only 3 WBC (2 monos, 1 poly)

**one case with only 2 WBC (1 mono, 1 poly)

Table 5

Aseptic Meningitis
Flint, Michigan—Summer, 1970

Virologic Results

Case #	Virus Isolated	Throat Swab	Fecal Swab	CSF	Serum Acute	Serum Conv.
70	E_3	−	+	+	1:8	1:128
73	E_3	+	+	+	1:8	1:64
84	E_3	+	+	−	1:8	1:64
89	E_3	−	−	+	1:8	1:64
80	E_6	−	−	+	N.D.	1:256
92	E_6	−	+	+	N.D.	N.D.
95	E_6	+	+	−	1:16	1:512

Virologic Results

A total of 100 specimens were processed for virus isolation. Fourteen of 37 (38%) spinal fluids, 12 of 29 (41%) rectal swabs, and 10 of 34 (29%) throat swabs were positive for ECHO virus type three. Thus out of the 49 patients studied, 23 patients were positive for isolation of ECHO virus three. Results of neutralization tests on paired sera from four patients from whom the virus was isolated are shown in **Table 5**. All four paired sera showed evidence of infection with ECHO virus type three. In addition, specimens from three other patients (two CSF's, one throat swab, and one rectal swab) were positive for ECHO virus type six. Paired sera from one patient, and convalescent serum from another showed a considerable rise in antibody titer against ECHO virus type six (**Table 5**). In no instance was more than one virus recovered from the same patient.

Discussion

The syndrome of aseptic meningitis is the most common manifestation of involvement of the central nervous system by an ECHO virus. Of the thirty-three currently recognized ECHO virus serotypes, at least 24 have been identified to varying degrees as causes of aseptic meningitis. Six ECHO virus types are known to cause epidemics of aseptic meningitis in different parts of the world. These are: type four,[3] type six,[4,11] type nine,[1,2,7,17,18] type eleven,[6,19] type sixteen,[10] and type thirty.[5] Recently ECHO virus type thirty-three was reported as a cause of epidemics of aseptic meningitis in Germany.[8,9] Sporadic forms of the disease were caused by these types and by additional serotypes. ECHO virus type three is among the types known at present to be capable of producing sporadic cases of aseptic meningitis. To our knowledge this is the first report on the association of ECHO virus type three with a community outbreak of aseptic meningitis.

In this study, ECHO virus type three was recovered from 23 of the patients with the clinical syndrome of aseptic meningitis. Fourteen of those patients yielded virus from the CSF thus firmly establishing the etiologic role of the virus in the syndrome. In addition, more than a four-fold rise in serum antibody titer was seen in the patients on whom convalescent serum was available.

In this epidemic, infection was primarily a disease of children, the peak incidence occurred in summer and the laboratory findings generally reflected a low white count, and a mild degree of spinal fluid lymphocytosis. However, a number of patients presented with CSF findings typical of bacterial meningitis. This is in general agreement with epidemics due to other types of ECHO virus. The virus was readily isolated from CSF, fecal swabs gave the highest yield of virus recovery, and throat swabs gave the least.

Some features of this epidemic deserve special mention. The disease occurred predominantly in children, with 43% below one year of age. There was a higher incidence in females than males in this age group in contrast to aseptic meningitis due to other types of ECHO virus in which males were more affected than females. Thirty precent of the patients presented with upper respiratory infection (URI) in addition to the aseptic meningitis syndrome. Although ECHO virus type three has been implicated as a cause of an outbreak of mild febrile respiratory illness in infants and nursery children,[16] this high degree of association of aseptic meningitis with URI is another unusual feature of the epidemic and has not been reported in descriptions of aseptic meningitis due to other types of ECHO viruses.

In certain outbreaks of entroviral diseases specific rashes have been observed alone or in conjunction with aseptic meningitis.[12] In this epidemic, rash was not a part of the clinical picture. Whether or not these features are characteristic of aseptic meningitis due to ECHO virus type three awaits description of more epidemics due to the same type.

ECHO virus type six was isolated from three patients during this epidemic. Infection is established by virus isolation from CSF in two patients and the rising antibody titer in one. The small number of cases, its occurrence in different age groups (four months, 10 years, 17 years), and its presence only during a two week period are in favor of the conclusion that ECHO virus type six played a minor role during the epidemic period which was primarily caused by ECHO virus type three.

Summary

An outbreak of aseptic meningitis which occurred in Flint, Michigan proved to be due to ECHO virus type three. Features of the outbreak included the young age of the majority of patients, a higher incidence in females, association with upper respiratory symptoms, and absence of rash. The virus was readily recovered from the spinal fluid.

Acknowledgement

The author wishes to express her appreciation to Doctor Arthur L. Tuuri, President of the Mott Children's Health Center for supporting the study. Thanks are also due to Mrs. Phyllis Page for her technical assistance, the attending physicians and housestaff of Hurley Hospital for their interest and cooperation in providing the clinical specimens, and to Doctor Morris Becker, Chief of the Virology Division in the State of Michigan Department of Public Health Laboratories for confirmation of virus identification and antibody titration.

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Perinatal Tips

By Paul M. Zavell, MD
Detroit

The following case from the files of the Wayne County Medical Society Perinatal Mortality Committee is presented as an aid in continuing education.

Maternal

This was the fourth pregnancy of a Gravida IV, Para I, 23-year-old, A negative, diabetic mother. (Her husband is Rh+). She had had diabetes since age nine and presently was on 64 units of Lente Insulin. She had gained from 132¾ lbs. to 143 lbs. Her blood pressure was 130/90 with +1 to +2 albumin in urine on several occasions.

In 1966 she had a spontaneous abortion at six weeks followed by a D and C. At the end of 1966 she had a one-month spontaneous abortion. In 1968 at 37 weeks gestation she had an elective C-Section and delivered an 8 lb. male who is alive and well at the present time.

This fourth pregnancy was complicated by difficult control of her diabetes. We have no further information except that at 33 to 34 weeks she was hospitalized for three days in another hospital for control of her diabetes. Her L.M.P. was 9/9/69 with estimated day of confinement of 6/17/70. She was seen regularly for her prenatal visits with amniocentesis done on 4/13/70 when Rh antibodies were negative. She was seen at 37 weeks for a prenatal visit and all seemed to be going well. The baby was thought to be small and it was decided to wait one to two more weeks to do her elective C-Section.

She was next seen on 6/5/70 with the story she had felt no fetal movements for 4-5 days. This was confirmed at physical examination when no fetal heart tones were heard. Studies done were as follows: blood sugar 492 on 6/5/70, 202 on 6/6/70, 154 on 6/7/70, 140 on 6/8/70. Hgb. of 14.9 gm on 6/6/70 and 13.1 gm on 6/9/70. VDRL neg. on 6/9/70. A.P. abdomen X-ray on 6/6/70 "Normal fetus in breech with no sign of fetal death seen."

Mother was hospitalized on 6/8/70, an elective C-Section was done revealing a stillbirth female infant weighing five pounds, 13¼ ounces. The autopsy found only some early maceration of infant believed to have been dead five to seven days.

Perinatal Committee Comments

1. Although an amniocentesis was done no Coombs test was done. It is felt this may have been of some value here in deciding the appropriate course to take.
2. It was felt that the presence of a small infant in a diabetic mother at 37 weeks pregnancy should not dissuade the obstetrician from doing a C-Section. Especially is this true if there has been prior infant loss or difficulty in any way in control of her diabetes. Instead the *small* infant should alert the obstetrician that something *might* be wrong (especially in a multipara).
3. Properly hospital-collected estriol levels at 37 weeks (and perhaps later) could be of some help in deciding upon the proper course to take in a problem diabetic pregnancy.

Doctor Zavell is chairman, Neo-Natal and Hospital Care Committee, Michigan Chapter, AAP; and chairman, Perinatal Mortality Study Committee, Wayne County Medical Society.

A case of necrotizing nocardial pneumonitis

By Zwi Steiger, MD
Barbara A. DeFever, MD
Edward G. Nedwicki, MD
Nicholas M. Jackiw, MD
Allen Park

Abstract:

We are presenting a case of nocardiosis that resembled a non-resectable carcinoma of the lung. The correct diagnosis was made only at the post-morten examination. It is postulated that the outcome of the case could have been different if the diagnosis of nocardiosis had been made earlier and proper therapy instituted.

A plea is made to include nocardia infection in the differential diagnosis of lung diseases.

It is doubtful that any thoracic surgeon will see more than one or two cases of nocardiosis in his career, and therefore, we feel that a case report is worthwhile. Recently we had a case of necrotizing pneumonitis of the lung due to nocardia which simulated an unresectable carcinoma.

Case Report:

A 39-year-old white male, E.H.B., was admitted to APVAH on November 27, 1967, because of cough and hemoptysis. A roentgenogram of the chest revealed an infiltration in the apex of the left lung. In the three weeks prior to his admission he had chills, fever, left chest pain and on one occasion he coughed up about half a cupful of bright red blood. He had lost about 20-25 lbs. in the last year. He had smoked a pack of cigarettes daily for 23 years and drank beer daily. The rest of his history was non-contributory.

He was well developed and in no acute distress. His physical examination was essentially within normal limits. His temperature was 99.8°.

On admission his Hgb. was 10.7 gms., HCT 34%, WBC 16,000 with 82 neutrophils, 11 lymphocytes, 6 monocytes and 1 eosinophile. VDRL was negative. No acid-fast bacilli were found in the sputum. Urine was normal. Tuberculin PPD intermediate (5 T.U.) was negative and so were the histoplasmin blastomycin and coccidiodin skin tests. Sputum cultures were positive for neisseria catarrhalis, Candida albicans, Streptococcus viridams and Diplococcus pheumoniae. Prothrombin time was off by three seconds. WBC eventually rose to 29,500. Bronchoscopy showed a small amount of purulent material coming from the left upper lobe. No tumor cells were found in the sputum.

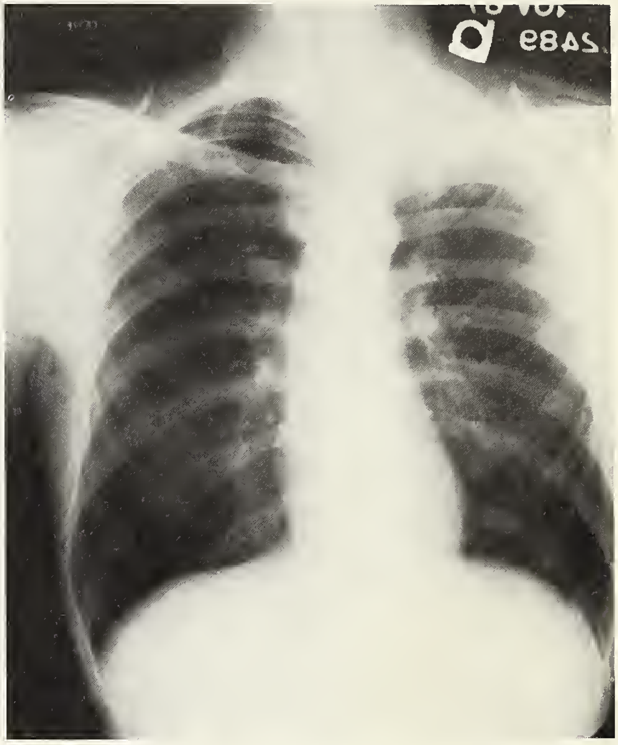

Figure 1. X-ray on admission shows a dense confluent and mottling infiltration in the left apex and intra-clavicular region with streaky extension towards the left upper hilum.

Serial roentgenograms revealed no change in the appearance of the lesion. Since the etiology could not be determined and the possibility of malignancy could not be ruled out, surgery was advised.

An exploratory thoracotomy was carried out on February 8, 1968. At the surgery the left upper lobe was indurated; necrotic tissue invaded the second and third ribs and the vertebrae medially. Because of the invasion of the adjacent vertebrae and the ribs, the lesion was considered non-resectable. Several pieces of tissue were obtained for histology. Frozen sections of these were reported as, "acute and chronic inflammation of undetermined etiology." Stains for acid-fast organisms and fungi were negative. It was assumed that the sections represented an inflammatory lesion distal to malignancy.

Doctors Steiger, DeFever, Nedwicki and Jackiw are with the departments of surgery, pathology, chest medicine and radiology, respectively, of the Allen Park VA Hospital. Doctor Steiger is an assistant professor and Doctor Nedwicki is an associate instructor, while Doctors DeFever and Jackiw are instructors at Wayne State University.

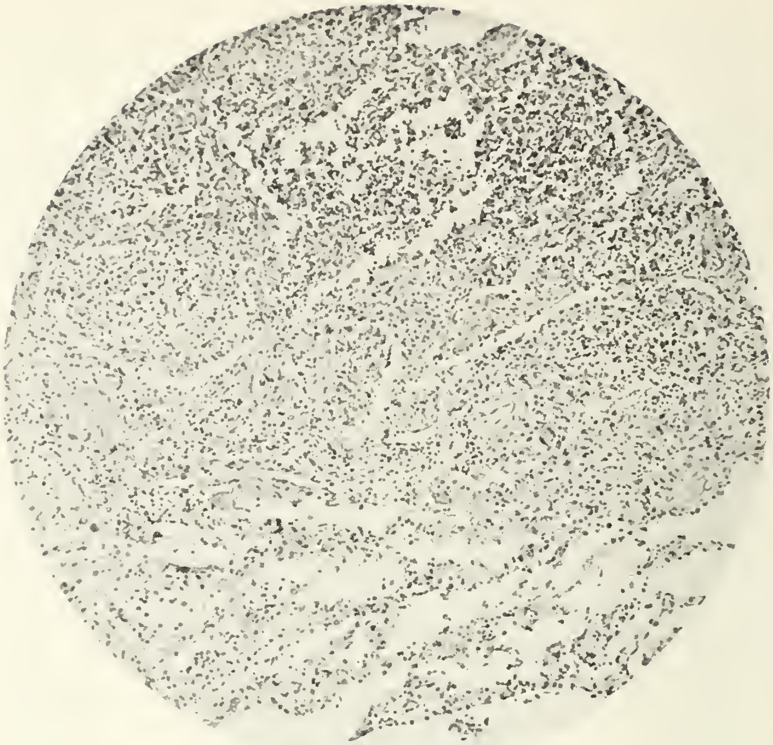

Figure 2. Lung: Inflammation with abscess. H&E x 65.

Postoperatively the patient ran a febrile course and on the ninth post-operative day he developed paraplegia which was felt to be secondary to invasion of the spine, and he expired a few hours later.

At autopsy the right lung was normal. The left lung weighed 650 gms. The pleura was thickened. The apical region was necrotic. Several small nodules were scattered in the lung parechyma. The hilar nodes were enlarged. The first and second thoracic vertebrae had punched out areas filled with necrotic material. The spinal cord seemed to have been compressed at the lower cervical and upper thoracic levels.

On microscopic examination of the lung, chronic and acute inflammation was seen with abscesses and small cavities lined by fibrous tissue. Histiocytes and occasional multinucleated giant cells were present. In the areas of inflammation, gram positive and weakly acid-fast branching filaments of bacterial thickness compatible with nocardia were seen. The inflammation extended into the chest wall. Similar findings were present in microscopic sections of vertebrae. Microscopic sections from the central nervous system showed central chromatolysis and axial swelling of the thoracic and lumbar spinal cord, possible secondary to compression and Wernicke's policencephalopathy.

Discussion

Nocard in 188 described an acid-fast fungus in cattle having multiple abscesses, draining sinuses and pulmonary involvement.[1] The micro-organism was later named Nocardia asteroides by Trevisan.[2]

Eppinger described the lesion in the human. The disease is not transmittable from one person to another. It is an exogenous infection contracted from organisms which grew saprophytically in the soil.[3] It is rarely found to be a containant.[4] Therefore, demonstration of the organism can be considered proof of the disease.

In Nocardiosis, gram-positive and partially acid-fast filaments of Nocardia asteroides are to be found in areas of suppuration and necrosis. Animal pathogenicity tests help to verify the diagnosis. The difficulty in establishing a diagnosis of Nocardiosis stems from the fact that the fragmented gram-positive filaments resemble gram-positive streptococci and diptheroids, and are reported as such. If on the smear fragmented acid-fast filaments are seen and sent only for culture of mycobacteria they are often destroyed by the concentration methods with sodium hydroxid and the cultures are then negative.[5,6]

The clinical features and course of this disease

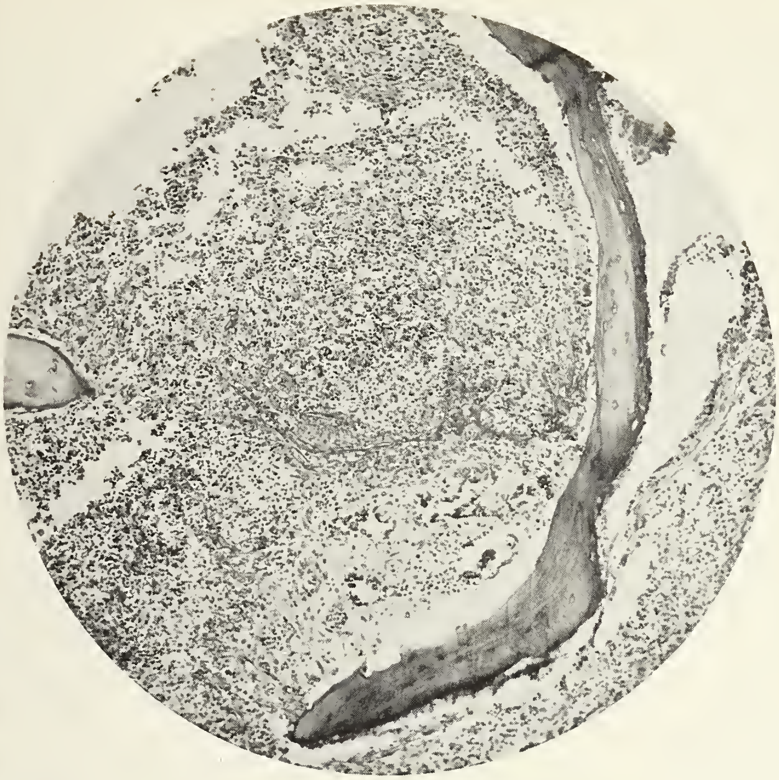

Figure 3. Bone: Acute inflammation with necrosis, H&E x 65.

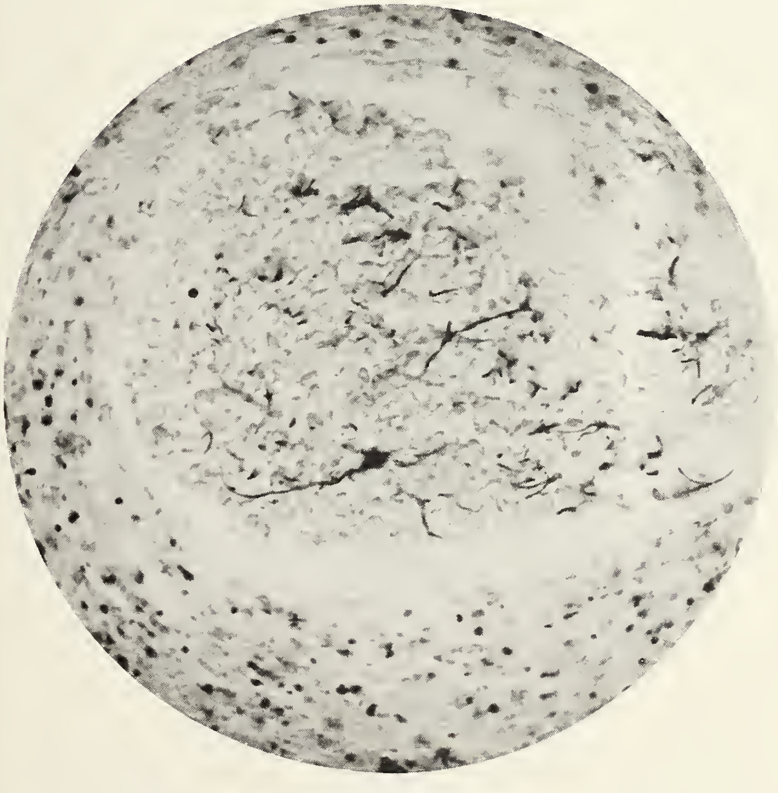

Figure 4. Bone: Delicate branching filaments. Gram stain x 385.

may closely simulate actinomycosis, but there is a greater tendency for cerebral metastasis and for multiple abscesses to develop. The clinical picture may manifest itself as tracheitis, bronchitis, pleuropulmonary fistula, pneumonia, peritonitis, meningitis, ischiorectal abscess, keratoconjunctivitis, endocarditis, abscesses in the thyroid, liver, spleen, lymph nodes, kidneys, adrenals, intestines and skeletal muscles.[7] The clinical manifestations are non-specific and the diagnosis is made only when suspected and proven by bacteriological means.

The radiological features of the lung lesions mimic those of tuberculosis, pneumonia and cancer of the lung.

Nocardia asteroides is occasionally found in patients with a chronic debilitating disease such as leukemia, carcinoma of the lung, Hodgkin's disease, myelofibrosis, hemolytic anemia, or in patients on prolonged steroid therapy. In these cases Nocardia asteroides is considered an opportunistic organism.[8,9]

Treatment

The treatment of Nocardiosis is mainly medical. The surgical part consists of incision and drainage of abscesses and empyema cavities.

In vitro and in vivo studies show sulfadiazine to be the agent of choice in the treatment of Nocardiosis. Some studies showed in vitro resistance of the organism to sulfadiazine. Despite this, it is advisable to give the patient the drug as discrepancies between in vitro and in vivo actions of sulfadiazine on Nocardiosis were reported. Addition of a broad spectrum antibiotic is advisable. The recommended dose is 6 to 10 gm. of sulfadiazine a day. This will give a blood concentration between 10 to 20 mg. percent. The medication should continue for several months after the manifestations of the disease subsided. Kidney function should be monitored for possible kidney damage.[7,10]

Summary

A case of necrotizing nocardiosis imitating a nonresectable carcinoma of the lung was presented. The disease entity was briefly reviewed. An appeal to include the disease in the differential diagnosis is made. The difficulties encountered in making the diagnosis are illustrated. Sulfonamides remain the drug of choice in treatment of Nocardiosis. Surgery in this disease is ancillary.

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Please send reprint requests to Doctor Steiger, VA Hospital, Allen Park, 48101.

A new fourth year at The University of Michigan Medical School

By Thomas J. Herrmann, MD
Ann Arbor

Introduction

The subject of this report is the new "all elective" senior year at the University of Michigan Medical School. This revision in the school's curriculum was first introduced during the 1970-71 academic year. Other medical schools have also modified their fourth year in a somewhat similar manner and some have reported on their experience.[1,2]

While a number of the more general aspects of the school's new fourth year are covered in this report, it is the elective process rather than the year itself that is the area of primary consideration. Having given students the opportunity to design for themselves the entire terminal year of the curriculum, the results of this activity were analyzed to determine the extent to which it exerted an influence on their choice of a future career in medicine. The "elective" process has a number of potential by-products. Effect on career goal selection was singled out for special attention both because of its importance to students and the entire health care profession and because the information available appeared to be more objective than that associated with other alternatives.

The University of Michigan Medical School Curriculum

In order to put Michigan's fourth year into its proper perspective, it is necessary to provide some detail about the year itself and to briefly describe the rest of the curricular modifications that were introduced into the three years that precede it. Starting with the freshman class in the fall of 1967, a major revision of the school's curriculum was begun and the first full cycle of this process was completed four years later with the graduation of the Class of 1971.

For the purposes of introducing more clinical teaching into the first two years, 40% of the time previously allocated to the basic sciences was eliminated. While reorganization of their teaching efforts varied from one basic science department to another, most responded to this challenge by affecting a reduction in the laboratory component of their medical student courses. The time thus gained during the freshman and sophomore years was to a large extent given over to two newly created, clinically oriented, interdisciplinary, two year vertical core courses; a clinical medicine sequence and a neural and behavioral sequence. The net result was to increase interdisciplinary teaching in the first two years to 38% in the first year and 66% in the second year. The degree of participation on the part of the School's clinical faculty was also increased; to 31% in the first year and 45% in the second year.

The clinical clerkships previously taught in all of the third year and half of the fourth were modified and relocated into the third year alone.

In the "all elective" fourth year, the student was permitted to select that set of courses felt to be most appropriate to a career goal already in mind or, in the case of uncertainty, to aid in the identification of such a goal. A special faculty counseling system and formal institutional review mechanism were established to assist the students in the development of their fourth year curricula. An entirely new group of senior elective opportunities was created by the faculty in a variety of areas including clinical, basic science and research. A modest number of guidelines for the "all elective" year were established by the faculty. The two most important were 1.) students were required to spend a quarter of their 40-week senior year in a course that dealt with the clinical care of patients in a broad-based and comprehensive fashion, and 2.) unless a compelling reason to the contrary was identified, three-fourths of the year had to be spent at the University of Michigan Medical Center or one of its core-affiliated group of hospitals. These included the Veteran's Hospital and the St. Joseph Mercy Hospital in Ann Arbor, the Wayne County General Hospital in Wayne and the Henry Ford Hospital in Detroit.

Thomas J. Herrmann, MD, is assistant dean, assistant professor of surgery, and assistant professor of postgraduate medicine at the University of Michigan Medical Center.

Table 1

Comparison of Departmental Contributions to Senior Curriculum

Department	% of 4th Year
Anatomy	2.4
Anesthesia	1.2
Dermatology	2.0
Internal Medicine	42.4
Neurology	4.0
Obstetrics/Gynecology	5.8
Ophthalmology	3.5
Otorhinolaryngology	2.8
Pathology	1.9
Pediatrics	5.0
Pharmacology	2.6
Physical Medicine	0.2
Physiology	0.2
Psychiatry	5.3
Radiology	7.5
Surgery	10.2
Non-Departmental Electives	3.3
Total	100.0%

Table 2

Orientation of Senior Elective Selections

Course Orientation	% of 4th Year
Clinical	88.5
Basic Science	4.9
Interdisciplinary (Joint Clinical—Basic Science)	2.0
Research (Clinical and/or Basic Science)	3.2
Misc. Electives	1.3
Total	100.0%

Table 3

Location of Senior Electives

Source	% of 4th Year
University of Michigan Medical Center	52.3
Core-Affiliated Hospitals	37.4
Non-Core Institutions	10.3
Total	100.0%

Methods

Medical school records for the 1970-71 senior year were used to determine the extent to which students chose electives in various disciplines (**Table 1**), the overall orientation of senior elective selections (**Table 2**), and the locations where these electives were taken (**Table 3**).

Other information used as the basis of this report was obtained directly from the members of the Class of 1971. During the latter half of their junior year, this class engaged in the process of choosing their senior electives. For the benefit of the faculty counselors and to assist the school in its institutional review of senior curricula, all students were required to identify in writing the status of their future plans and how these related to the courses of study being proposed. In this way, specific information on pre-senior year career goals was obtained.

On the afternoon prior to their graduation, a questionnaire was distributed to the Class of 1971 asking about the year just completed and some of its more important components and characteristics. Included were questions that related to the realization of student expectations, the extent to which the year had met a number of educational goals, and the sufficiency of elective opportunities made available by the school in a variety of areas. The students were also asked to retrospectively identify the format they preferred for their fourth year of medical education.

In the final section of the questionnaire, the soon-to-be-graduates were asked to again state their plans for a future career and also to identify from a list of options the types of influence their elective fourth year had exerted on the plans they had made. In about a quarter of the cases, students' perception of how the elective fourth year had influenced career goal selection differed from the more objective data that was available; namely, the before and after identification of career goals. When this discrepancy occurred, the type of fourth year influence referred to in **Tables 10 and 11** was adjusted to reflect the more objective, and thus more reliable information.

From a total of 201 graduates, 180 completed all sections of the questionnaire for a response rate of 89.5%. Those 180 students about whom a complete spectrum was obtained were used as the study group for this report.

Findings

When given the opportunity to design for themselves an entire year of their medical education, Michigan's Class of 1971 responded as might be predicted in many ways but still managed to generate a few surprises. Quite unexpected was the degree to which this class chose electives oriented in the direction of further clinical training, **Table 2**. With the strong emphasis on the "clinical" in the first two years of the curriculum, the school thought there would be a significant amount of senior student interest in taking additional work in the basic sciences and in other areas related only indirectly to the care of patients.

When all was said and done, however, an average of almost 90% of the 1970-71 senior year was spent in the clinical disciplines. Of even greater significance perhaps, was the extent to which

Table 4

Realization of Student Expectations During "All Elective" Senior Year

	None	Little	Partially	Mostly	Fully
% of Expectations Fulfilled	0%	25%	50%	75%	100%
No. 1971 Graduates	0	6	37	119	20

11.0% of the Study Group realized all of their expectations.

76.3% realized most (75%) of their expectations.

96.7% realized at least half of their expectations.

senior electives were chosen in the field of internal medicine. As shown in **Table 1**, the class averaged over 40% of its senior year in that discipline with surgery a distant second at slightly over 10%. With only 21 members of the class naming internal medicine as their choice of a future career (**Table 9**), it is apparent that a large number of students interested in other careers still felt that the internist had much to offer in the way of further education at the senior level.

Although the guidelines specified that seniors were permitted to spend up to a quarter of their year in electives originating outside of the Medical Center and its core-affiliated group of hospitals, **Table 3** shows that only slightly over 10% of the year on the average was actually spent at outside institutions. Of that 10%, about a third was spent in foreign countries and two-thirds in this country. Outside electives taken in this country were divided about equally between the State of Michigan (2.9%) and the other 49 states (3.6%).

From the data obtained from the questionnaire, it would seem that most members of Michigan's Class of 1971 were quite satisfied with the experience they had just concluded. As shown in **Table 4**, 11.0% stated that they had realized all of their expectations and 76.3% realized most of what they had hoped to accomplish. 85.3% said that they had enjoyed the year to more than just a moderate degree, **Table 5**. When given the opportunity to choose in a retrospective fashion among a number of curricular alternatives for the fourth year of their medical education, both the "all elective" fourth year and some form of rotating internship format were either the first or second preference for over 80% of the study group, **Table 7**.

When asked to quantitate the extent to which the year had been helpful in reaching a variety of educational goals, the students selected an increase in general medical information and the filling-in of knowledge and experience gaps left over from the three previous years of the curriculum as the two areas of greatest benefit, **Table 5**. It is somewhat disappointing to note that only a little over half of the class were more than moderately pleased with the practical training received or the degree to which a better understanding of their patients had been achieved. Even less felt that the year had satisfactorily augmented their previous training in the basic sciences. While generally satisfied with the variety of electives made available

Table 5

Extent to Which Senior Year Met Educational Goals

Categories	% of 1971 Graduates More than Moderate	Moderate	Less than Moderate
a) Increased general medical knowledge	70.4	27.4	2.2
b) Filled in knowledge or experience gaps	79.0	17.7	3.3
c) Provided practical help for patient care	53.9	29.4	16.7
d) Improved understanding of patients	54.5	33.3	12.2
e) Augmented basic science training	29.4	37.8	32.8
f) Was Fun!	85.3	11.3	3.4

Table 6

Satisfaction with Availability of Elective Opportunities

Categories	% of 1971 Graduates		
	Not Enough	About Right	Too Much
Clinical Specialties/ Subspecialties	5.8	93.6	0.6
Primary/Comprehensive Health Care	38.2	60.6	1.2
Contact with Physicians in Private Practices	52.9	46.5	0.6
Combined Clinical - Basic Science	29.3	70.7	0.0
Basic Science	15.0	83.2	1.8
Research	6.1	87.8	6.1
¾ of Senior Year at Medical Center or Core-Affiliated Hospitals	6.0	44.3	55.7

Table 7

Preference for 4th Year of Medical Education

Alternatives	% of Graduates Indicating 1st or 2nd Choice
a.) "All Elective" Format	83.4
b.) Mixed Elective and Regular Courses	12.6
c.) Rotating Internship Format	81.3
d.) First Year of Residency	34.5

Table 8

Status of Career Goal Selection Before and After Elective 4th Year

Status of Future Career Planning	Before 4th Year		After 4th Year	
	No. of Students	% of Total	No. of Graduates	% of Total
Identified Single Career Goal	91	50.6	157	87.2
Considering Two or More Alternatives	40	22.2	20	11.1
Totally Undecided	49	27.2	3	1.7
Study Group Totals	180	100.0%	180	100.0%

by the school in most areas, a significant number of students felt that more opportunities should have been provided in the field of primary comprehensive health care and even more felt that the amount of contact available with physicians in private practice was not adequate, **Table 6.** It is of interest that over half of the class felt that three-quarters of the year spent at the Medical Center and its core-affiliates was a bit too much.

When asked to identify their career goals prior to the beginning of their fourth year, as shown in **Table 8**, 50.6% of the 180 members of the study group indicated that they were quite certain of their future plans. However, the remainder for one reason or another, were unable to be as specific. These included 22.2% who could only narrow their choices down to a list of alternatives and 27.2% who were too uncertain at that point in their training to provide the school with any information about their future plans. When asked a second time to identify their plans, now after having completed the elective fourth year, a significantly higher percentage was able to settle on a single career choice (87.2%). Those continuing to remain uncertain (1.7%) or still unable to eliminate one or more alternatives (11.1%), while by no means insignificant in their numbers, were substantially reduced from the year before.

The types of career goals identifed by graduating seniors are shown in **Table 9.** Since both medicine and surgery really represent a grouping of separable specialty interest, it is hardly surprising that they were by far the most popular choices. When the data is viewed in terms of individual disciplines, it becomes apparent that the future career choices of Michigan's seniors cover a fairly broad spectrum.

Table 10 shows the frequency with which various types of influence effected the career goal selection process during the course of the elective fourth year. When one subtracts from the total the groups of students whose future planning was not effected (Groups 1 and 2) or merely reinforced (Group 3), there is still a residual of 108 individuals or 60.0% (Subgroup B) who indicated that their experience over the past year had noticeably influenced their choice of a future career. Of those 108, 38 had been able to find a career goal where none had existed before, 36 selected a single goal from a list of two or more previously considered alternatives, 27 actually changed from one previously identified goal to another and seven previously certain of their career goals, became uncertain during the year. When the same information is viewed by way of a discipline by discipline comparison, as was done in **Table 11**, one finds some differences between disciplines but these do not appear to be great.

Comments

From the material just presented, it is apparent that Michigan's graduating Class of 1971 was 1.) reasonably pleased with the "all elective" format of its senior year, 2.) felt the need to take a significant amount of additional training during the senior year in the clinical disciplines, most especially in internal medicine and 3.) chose to spend the majority of its fourth year at the Medical Center and its core-affiliated hospitals. While undoubtedly successful in many of its aspects, the school's first attempt to mount an "all elective" senior year was by no means a complete success. Some of the problems that occurred have been pointed out in earlier sections of this report.

A matter of particular significance was the amount of movement in career goal selection that occurred during the course of the elective fourth year. When one looks only at those students who were totally undecided in their choice of a future career, the initial size of that group (27.2%) and its subsequent reduction throughout the fourth year (to 1.7%) is about what one might expect given the pressures that currently exist to make a firm career decision before the period of graduate medical education begins. In actuality, movement in career goal selection involved not only those who were undecided but a number of others as well and finally amounted to 60% of the 180 member study group. While it is true that some degree of activity would have occurred in all of the influenced categories cited in this report regardless of the format used for the fourth year, it is highly probable that the total magnitude of this activity was significantly greater than what might have occurred under a non-elective or minimally elective fourth year format.

In addition to the combined size of the several groups whose career goal selections were significantly influenced, the quality of the decision-making process employed by students is also a factor that must be taken into consideration. The class in question was not a group of students whose exposure to clinical medicine prior to their fourth year need be judged as inadequate. In addition to the clinical clerkships that occupied the entire 48-week third year, this class also spent nearly half of its first two years in courses oriented to clinical medicine and taught to a significant extent by the clinical faculty. In spite of this, a high proportion of the class indicated that some to most of their fourth year electives were chosen to gain additional familiarity with disciplines either already selected or being seriously considered as a future career. Often, the experience that ensued was either positive in nature, when a student spent time in a discipline and it proved to be enjoyable and satisfying, or negative, when a previously considered choice was found to be unsuitable for a

Table 9

Career Goal Selections of 1971 Graduates

Discipline	Graduates Selecting Discipline	% of Total
Anesthesiology	5	2.8
Dermatology	2	1.1
General Practice	14	7.8
Internal Medicine	37*	20.6
Neurology	2	1.1
Obstetrics & Gynecology	20	11.1
Ophthalmology	11	6.1
Otorhinolaryngology	8	4.4
Pathology	3	1.7
Pediatrics	7	3.9
Psychiatry	4	2.2
Radiology	8	4.4
Surgery	36**	20.0
Uncertain	23***	12.8
Study Group Totals	180	100.0%

* Includes General Internal Medicine (20) and Medicine Subspecialties (17).

** Includes General Surgery (13), Orthopedic Surgery (9), Urology (6), Thoracic Surgery (4), Neurosurgery (3), and Plastic Surgery (1).

*** Includes Totally Undecided (3) and those considering two or more alternatives (20).

Table 10

Elective 4th Year Influence on Career Goal Selection

Type of Influence	No. of Graduates	% of Total
Group 1: Uncertain and continued **uncertain.**	16	8.9
Group 2: Previously identified, unchanged and **no effect.**	5	2.8
Group 3: Previously identified, unchanged but **reinforced.**	51	28.3
Subgroup A: No effect or minimal effect on career goal selection	72	40.0
Group 4: Previously identified and now **uncertain.**	7	3.9
Group 5: Previously identified and now **changed.**	27	15.0
Group 6: **Selected** from two or more previously considered alternatives.	36	20.0
Group 7: **Identified** where none previously existed.	38	21.1
Subgroup B: Significant effect on career goal selection.	108	60.0
Study Group Totals	180 Graduates	100.0%

Table 11

Elective 4th Year's Effect on Career Planning Analyzed by Discipline Selection

Career Goal Selections	No. of Graduates Selecting Discipline		
	Total No.	No Uneffected or Minimally Effected*	No. Significantly Effected**
Anesthesiology	5	1	4
Dermatology	2	2	—
General Practice	14	7	7
Internal Medicine	37	9	28
Neurology	2	2	—
Ob/Gyn	20	8	12
Ophthalmology	11	6	5
Otorhinolaryngology	8	4	4
Pathology	3	—	3
Pediatrics	7	3	4
Psychiatry	4	1	3
Radiology	8	1	7
Surgery	36	12	24

* Coincides to Subgroup A, Table 10

** Coincides to Subgroup B, Table 10

life-time career. In both circumstances, it is likely that more informed, and thus better decisions were made than would have been the case without the benefit of an "all elective" fourth year.

Conclusions

With the pressures being exerted by today's society for more and better health care, all facets of medicine including its educational continuum are being seriously re-evaluated. It has been recommended by some that benefit can be gained by reducing the time spent in medical school from four to three years.[3,4,5] Some medical schools across the country already have or are planning to move in this direction.[5,6,7] The Federal Government has given a measure of support for this concept in the past and new legislation is pending before Congress that would serve to increase the level of this support.

Evidence has been presented in this report to show that Michigan's fourth year in its current format is popular with students, assists in the attainment of certain educational objectives and most significantly perhaps, appears to facilitate a relatively large number of changes in career goal selection. By and of itself, this information is obviously insufficient to affirm or deny the continued need for a fourth year in medical school or to suggest that future changes should not be made in this school's fourth year curriculum; our present system of undergraduate medical education is too far from ideal to permit that luxury. It would seem, however, that the "all elective" senior year does serve a very useful purpose for a large number of students and should not be eliminated or significantly modified until the substitute chosen in its place has been adequately tested for a number of important characteristics, most specifically for its ability to respond to a common medical student need; information and experience to assist in the choice of a future career.

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Tumors of the liver in early infancy:
Hepatoblastoma

By S. S. Yang, MD
A. J. Brough, MD
Jay Bernstein, MD
Royal Oak

Abstract

Hepatoblastoma is a distinctive tumor predominantly of early childhood that can be differentiated histologically from other hepatic tumors. The microscopic appearance, marked by neoplastic epithelium and connective tissue elements, is characterized by a resemblance to embryonal and fetal liver. The tumor can often be surgically resected, and despite considerable operative risk the prognosis is relatively good in contrast to that of hepatocarcinoma, from which it must be differentiated pathologically.

Introduction

Surgical resection of hepatic neoplasms has in the last two decades become the customary and expected form of therapy. With refinement of operative techniques, generally good results can be anticipated in treating benign tumors and malformations. Hepatic carcinomas have also been resected, and an increasing number of apparent cures has led to a clearer understanding of the behavior of malignant tumors in childhood. Reports of long-term postoperative survivals have shown that success is generally associated with one of two types of hepatic carcinoma.

Willis[1,2] is credited with the recognition that embryonal carcinoma, comparable to the embryonal nephroblastoma or Wilms' tumor of the kidney, does occur in the liver, where it can be differentiated histologically from primary carcinoma of the adult type. Despite the common histologic complexity of these tumors and the difficulty in evaluating individual cases, malignant hepatomas in childhood can be separated into 1) fetal or embryonal cell types, called hepatoblastoma, and 2) differentiated or mature cell types, called hepatocellular carcinoma or hepatocarcinoma. Willis, writing before the results of surgical treatment had been publicized and believing hepatoblastoma to be a highly malignant tumor, actually questioned the validity of the distinction. The recent clinical-pathological studies of Ishak and Glunz[3] and of Kasai and Watanabe,[4] clearly justify, however, the practicality of this classification. It is apparent that hepatoblastoma carries the better prognosis, individual results depending to a great extent on resectability of the tumor and possibly on the age at operation. Successful treatment requires also early diagnosis and early surgical intervention.

These views have been presented in recent pathological and surgical publications.[3-6] The purpose of this paper is to summarize them and to review the experience at the Children's Hospital of Michigan.

Experience at Children's Hospital of Michigan

A review of hepatic tumors filed since 1940 revealed 16 primary epithelial neoplasms, which were classified histologically[3,4] as anaplastic hepatoma (three cases), hepatocellular carcinoma (four cases) and hepatoblastoma (nine cases). In all nine cases of hepatoblastoma (**Table I**) a laparotomy was performed, and in two thought to have bilateral hepatic involvement the procedure was limited to a biopsy. Subsequent postmorten examination, after unsuccessful irradiation and chemotherapy, in one (Case 8) showed that the hepatic tumor was indeed a single mass limited to the right lobe. There were, however, occasional small pulmonary and vertebral marrow metastases one month after biopsy.

Each of the other tumors was a single mass, four in the right lobe and one in the left, varying in size between 9.5 and 13 cm. The age range was two weeks to 10 years. Three children died on the operating table, two in 1960 and since then only one other, a two-week-old. The successful operations included three lobectomies and one partial hepatectomy. The four children surviving surgical resection of the tumor are all alive and free of disease for periods of 21 months, two and a half years, three years and eight years. No cases of hepatocellular or anaplastic carcinoma survive; one of each had undergone surgical resection.

The tumor was in each case delimited from the adjacent hepatic parenchyma, sometimes encapsulated by a layer of greyish-white, membranous connective tissue. The cut surfaces were nodular

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The authors are with the Departments of Pathology of William Beaumont Hospital, Royal Oak, Michigan, Children's Hospital of Michigan and Wayne State University College of Medicine, Detroit.

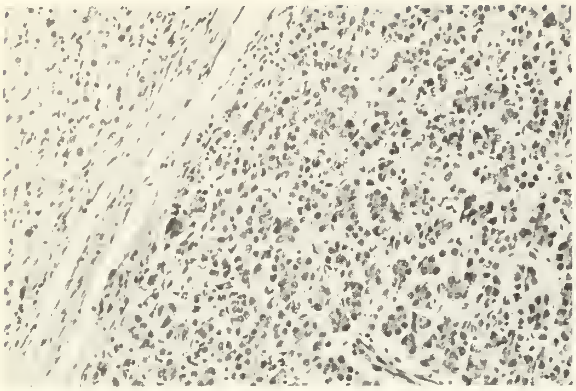

Fig. 1. Fetal type of hepatoblastoma containing relatively well differentiated, vacuolated and clear cells, generally arranged in cords and trabeculae; the tumor is separated from compressed non-neoplastic liver tissue by a thin fibrous capsule. Case 4. Alive and well eight years after right partial hepatectomy. H&E stain. Magn. 160X.

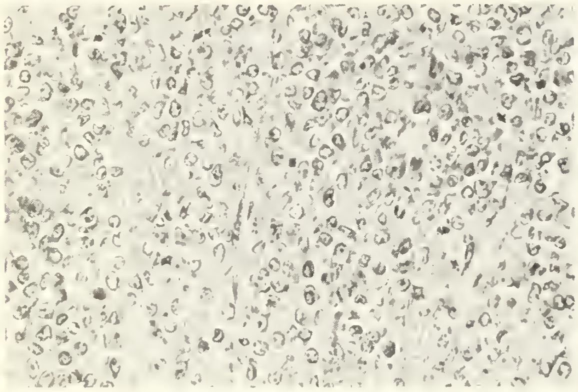

Fig. 2. Histologic pattern of hepatocarcinoma for comparison with Fig. 1. Cells are pleomorphic; the nuclei are large and vesicular; often containing prominent nucleoli. The pattern does not resemble embryonal or fetal liver. 22-month-old boy with evidence of metastatic disease shortly after biopsy. H&E stain. Magn. 350X.

and variegated, displaying focal areas of hemorrhage, necrosis and bile-staining in generally soft, fleshy, pale tumor masses.

Histologic evaluation in most instances provided easy differentiation of hepatoblastoma from hepatocarcinoma (Fig. 1 & 2); two specimens were relatively difficult, although the three authors were in complete agreement on reviewing the slides. Tumor cells resembled fetal (Fig. 1) and embryonal (Fig. 3) cell types in the nine hepatoblastomas, five fetal and four mixed. The fetal cells were uniform, small, and polygonal or cuboidal, con-

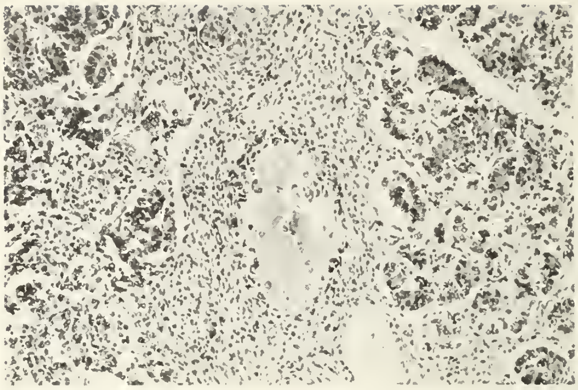

Fig. 3. Hepatoblastoma of mixed cell type with fetal epithelial elements, a sarcomatous stromal component, and osteoid metaplasia. Case 6. Four-month-old child alive and well two and a half years after right hepatic lobectomy. H&E stain. Magn. 150X.

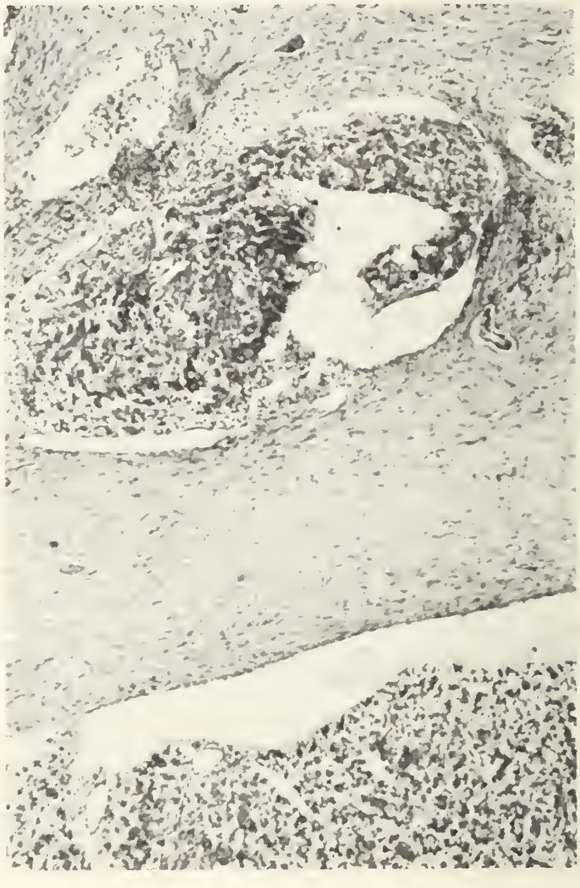

Fig. 4. Hepatoblastoma in a six-month-old infant. Apparent vascular invasion in a fibrotic portal area at margin of tumor. Case 5. Alive and well three years after wedge resection. H&E stain. Magn. 40X.

Table 1

Cases of Hepatoblastoma Treated at Children's Hospital of Michigan

Case	Year	Name	Age	Race	Sex	Location	Size	Surgery	Outcome
1.	1952	W.P.	4½ Y	W	M	Bilat.		Bx	Presumed dead (discharged in terminal state)
2.	1960	T.K.	3 Y	N	F	R	11cm	RHL	Died during surgery. Operation delayed 3¾ month after biopsy
3.	1960	L.L.	1½ Y	N	F	R	12cm	RPH	Died during surgery
4.	1962	J.W.	10 Y	W	M	R	13cm	RPH	Alive without disease 8 years
5.	1967	W.E.	6 M	W	F	L	10cm	Wedge resect.	Alive without disease 3 years
6.	1968	J.T.	4 M	W	F	R	9.5cm	RHL	Alive without disease 2½ years
7.	1968	L.S.	½ M	W	F	R	9.5cm	RHL	Died during surgery
8.	1969	S.J.	9 M	W	M	R	12cm	Bx	Died 1 month after biopsy with metastasis
9.	1969	N.P.	6 M	W	M	R		RHL	Alive without disease after 21 months

RHL—right hepatic lobectomy
RPH—right partial hepatectomy
Bx—biopsy

Table 2

Survey of Recent Literature

Surgically Treated Cases of Hepatoblastoma

		Surgical Resection	OP Death	Late Death	Survived	Comment
1. Clatworthy et al, 1961[7]	12	5	2	3*	0	*One with septicemia
2. Nixon, 1965[8]	—	5	2*	2**	1 (1y)	*One due to IVC thrombosis; the other to pulmonary infarcts **Due to recurrence & metastasis
3. Fish & McCary, 1966[9]	4	1			1 (44m)	Reported as embryonal hepatomas
4. Ishak & Glunz, 1967[3]	35	18	4	5*	9 (4-13y)	*Died 1-34m (av. 10.8m); 4 had metastasis
5. Ito & Johnson, 1969[5]	5	3			3 (12m, 20m, 29m)	
6. Kasai & Watanabe, 1970[4]	31 Fet.	15	4	2*	9 (18m x2, 3-6y x7)	*Died 11m & 2y6m with recurrence
	16 Emb.	8		5*	3 (8m, 4y, 3m died of unrelated disease)	*Recurrence 5-18m
7. Schiodt, 1970[6]	7	4	2		2 (24m, 29m)	
8. CHM, 1970	9	7	3		4 (21m, 2½y, 3y, 8y)	
Total		66	17	17	32 (20 surviving more than 3 yrs)	

taining oval to round nuclei and distinct nucleoli. The cells often contained clear or vacuolated cytoplasma, in which both fat and glycogen were demonstrated. The tumor cells were arranged in cords or trabeculae, usually two cells thick, which were separated by sinusoids. Hematopoietic cells were present in all but one case. Bilestasis was present in fetal cells. The mixed tumors contained, in addition, embryonal cells resembling those seen in extremely immature liver tissue (Fig. 3). These cells were less differentiated and appeared to be less mature than the fetal type. They were more elongated and often less cohesive, being arranged in irregular sheets and ribbons. Acinar, pseudorosette, and papillary formations were commonly present. Bile-stasis was not associated with immature, embryonal cells. In comparison with the fetal type, mitoses were more common; hemotopoiesis was lacking. Foci of hemorrhage, necrosis and calcium deposition were present in association with both types of cells. Apparent vascular invasion was seen at the tumor margins in both types, but was not a reliable indication of prognosis (Fig. 4).

Primitive mesenchymal tissue in various proportions was also noted in association with both cell types (Fig. 3). Islands of osteoid were present in two instances. Clusters of keratinized squamous

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Please address reprint requests to Department of Pathology, William Beaumont Hospital, Royal Oak, Michigan 48072.

epithelial cells were seen in three, and pigmented granules similar to melanin were present in epithelial and mesenchymal cells of one case.

Discussion

Several series[3-9] and our own material, summarized in **Table II**, total 66 cases in which the tumor, identified as hepatoblastoma, was surgically resected. The operative mortality has been high (26%); perhaps figures for only the last five years would be less formidable, reflecting better surgical technique. Nonetheless, favorable outcomes have been described in almost half of the 66, and of the 49 cases undergoing successful resection, 32 (65%) were listed as surviving, 20 of them for more than three years. To these figures may be added several reports of individual cases,[10-16] but complete tabulations are impaired by inadequate histopathologic documentation or a failure in some recent papers to distinguish between hepatoblastoma and hepatocarcinoma.[17-21] The prognosis in hepatocarcinoma is in contrast unquestionably poor; Ishak and Glunz[3] cite only five published reports of long-term survivals.

The important point is that these data indicate a relatively good prognosis for hepatoblastoma in operable cases. The survival in unoperated cases seldom exceeds 12 months.[3] Chemotherapy and irradiation have thus far been of no value,[3,4,9] and an aggressive surgical approach is, therefore, justified. The tumors are, despite their bulk, most often single masses, and bilobar involvement is relatively infrequent. Therefore, the resectability rate is potentially high. In the series of Ishak and Glunz,[3] 28 of 35 tumors formed single masses, and 25 were strictly localized to one lobe of the liver. Other series have indicated a greater than 50% rate of resectability. Our own series carries a theoretical resectability of 90% (eight out of nine). In one case resection was not carried out because there was mistakenly thought to be bilateral hepatic involvement. The surgeon may be faced with a difficult task, requiring greater than usual operative finesse and delicate postoperative care, but he has small chance otherwise for success.

We wish to emphasize that the data in **Table II** show a survival for more than three years in approximately one-third of the tabulated cases. The proportion increases significantly, of course, in successfully operated cases. Patients with postoperative recurrences, on the other hand, expired prior to 34 months, and metastases had become evident earlier than that. Those patients alive and well three years after surgery, might, therefore, anticipate permanent relief.

The tabulated data show that hepatoblastomas are predominantly tumors of early childhood, although exceptions have been noted. The series reported by Kasai and Watanabe[4] included patients of five, six and eight years, and Ito and Johnson[5] had a patient 12 years of age. One of ours, now surviving eight years after resection of the tumor, was 10 years old. It seems unreasonable, therefore, to classify hepatic tumors according to age at onset, as suggested by Misugi et al.,[22] for the prognosis relates to the histologic structure rather than the age. The younger patients in the series of Misugi and colleagues[22] appear all to have had hepatoblastoma.

Willis,[1,2] in recognizing that hepatoblastomas can be differentiated from hepatocarcinomas, divided the former into those epithelial tumors resembling embryonal or fetal liver parenchyma and those mixed tumors containing also sarcomatous mesenchymal elements, including cartilage and bone. He also recognized a rhabdomyoblastic sarcoma that subsequent authors have tended to classify in a separate group with sarcoma botryoides of the extrahepatic bile ducts. Ishak and Glunz[3] preserved the distinction between epithelial and mixed tumors, although no clinical differences emerged from their study. Kasai and Watanabe[4] emphasized the classification of hepatoblastomas into anaplastic, embryonal and fetal types. It appears, however, that the anaplastic pattern may be associated with aggressive growth and early metastases, warranting separation from other types of hepatoblastoma. We have not been able to preserve a strict differentiation of fetal and embryonal types, nor have clinical differences been apparent.

Willis[1,2] admitted the difficulty of always distinguishing between fetal hepatoblastomas appearing late in infancy and adult-type hepatocarcinomas appearing early in childhood. Contemporary pathologists are, however, constrained to make that distinction, keeping in mind the predominance of hepatoblastoma in early childhood.

Ultrastructural studies[5,22] have shown hepatoblastomas to contain undifferentiated cells; the paucity of cytoplasmic organelles is in sharp contrast to their abundance in hepatocellular carcinoma.

Of special interest are the concurrences with hepatocellular tumors of several anomalies and metabolic disturbances, among them hemihypertrophy, osteoporosis, and hypercholesterolemia. We have not encountered a specific association with either type of tumor, except that virilization is apparently more often associated with hepatoblastoma. Increased serum concentration of alpha-I fetoglobulin has occurred in association with hepatoblastoma,[23] as well as with hepatocarcinoma, and does not serve to differentiate between the two.

Summary

Hepatocellular tumors in childhood can be differentiated into hepatoblastoma and hepatocarcinoma. The former, composed of cells resembling embryonal and fetal liver, often admixed with sarcomatous mesenchymal elements, can, if surgically resectable, be accorded a relatively good prognosis. A tabulation of reported cases indicates a survival of three years or longer approaching 50% in successfully operated cases. A majority of tumors is anatomically resectable. Despite characteristic age distribution, the recognition of this type of hepatoma rests on histologic criteria. Individual cases require prompt and aggressive surgical management.

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Your opinion please

MSMS asked the question:

What are your opinions on continuing medical education for physicians? Should it be required for relicensure? How much should be required? How would you set standards? How would you suggest that Michigan physicians best obtain further education during their careers?

(The MSMS Committee on Continuing Physician Education has recommended a program of requirements for re-registration, and a new task force, led by former MSMS President Robert J. Mason, MD, Birmingham, has been charged with submitting a detailed series of recommendations to the 1972 MSMS House of Delegates.)

These doctors replied:

Henry T. Forsyth, MD
Chesaning

When it comes time to set down my thoughts in writing with regard to continuing medical education as a requirement for relicensure, I find that it is not a simple task.

In this day and age of rapid advancements, improvements in knowledge and skills in the medical field appear at such a rate that any practitioner of any specialty cannot hope to be maximally effective in caring for patients if he does not participate in continuing medical education on a reasonably regular basis. We also tend to forget to some degree many of the basics with which we were once familiar if we do not use them regularly in our practices. Therefore I feel that continuing medical education is an extremely desirable goal and is necessary for one to be the best provider of the best medical care that he is capable of.

How best to obtain needed postgraduate medical education is a big question. I have found that courses given at or under the direction of universities are most valuable to me in terms of useful knowledge. However, there are many seminars, symposia, "clinic days," which are also valuable. Audio Digest and other taped materials are very worthwhile. Reading journals is a valuable day-to-day activity but many articles are of little value and much time can be lost unless one is selective.

Doctor Forsyth

I personally would recommend courses given by universities as being the best and easiest and most enjoyable, but the journals and the tapes are essential, also. Programs at hospital staff meetings and at county medical society meetings also are helpful.

Now I would like to set forth my views on how much should be required, how to set standards, and whether or not continuing medical education should be a requirement for relicensure.

I will begin by saying that although I believe and have stated that continuing medical education is extremely desirable and is necessary if one is to be maximally effective in providing the best in medical care, I do not feel that it should be a requirement for relicensure.

I am a member of the American Academy of Family Practice. In order to remain a member I must acquire 150 hours of postgraduate credit in each three-year period. This is not difficult to do if one plans ahead. The American Board of Family Practice, the newest specialty board, requires that one pass examinations before certification just as all specialty boards do. It also requires re-examination every six or eight years to maintain that certification—a practice that other boards have considered and may follow.

The county medical societies, the hospital staffs, and the various specialty boards have been and will continue to be the most effective instruments to maintain high standards of medical practice. The standards they demand are far more stringent than the state could require for relicensure and I fear that such a requirement might lead to some deterioration in standards rather than the improvement that would be hoped for.

A physician will be a better physician not because he has attended a post-graduate course, but because he wants to be a better physician. You cannot legislate desire, and I sincerely believe that the voluntary methods now being utilized by physicians to improve their knowledge are far more effective than meeting a specified basic requirement for relicensure.

In closing, I would like to point out that in my experience it is a rare thing to meet a physician who has not attended some meeting, seminar or symposium in the recent past. I therefore do not believe that making continuing education a requirement for relicensure would result in a hardship or in any difficulty for the vast majority of doctors. My fear would be that meeting the requirement for relicensure might tend to become the end-point which would replace the voluntary search for excellence which now prevails.

John J. Rick
Coldwater

In this present area of medicine characterized by rapid changes in technology and basic medical knowledge, it is imperative that the practicing physician keep abreast of all new developments. The question no longer is whether or not post-graduate education is needed, but rather how to deliver this education and then how to insure that the physician fulfills certain basic requirements in this area of continuing education.

The most immediate need is in the area of developing a suitable educational program. This must be accomplished before any rigid enforcement rules can be formulated. The best program would be one that could be delivered at the local level so that the physician could receive his training without leaving the community.

In order to establish this type of local teaching program certain resources would have to be developed.

1. A cadre of teaching-physicians who would be accepted by their peers and have the time to develop a program *APPROPRIATE TO EACH COMMUNITY.*
2. Teaching resources such as slides and tapes to provide the proper visual and auditory aids.
3. Resource consultants that could be brought into the community as needed to supplement any teaching program.

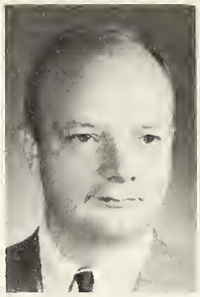
Once this type of program is operational, then the local physician could better decide his interests and deficiencies. With this knowledge the physician could then choose various regional or national meetings to supplement his specific needs.

If and when such a program is made operational the next logical step is developing certain minimal criteria of post-graduate education for all physicians. Until the educational facilities are available on a continuing basis, rules to enforce such eduction are superfluous. What we really need is some objective method of evaluating the worth of post-graduate education so that effective methods of presentation and application could be developed. Pre-teaching and post-teaching levels of effective medical care will have to be developed in order to decide if the teaching is worthwhile.

To arbitrarily state that each physician should attend so many hours of meetings, read so many journals, and listen to so many tapes is not the answer. Until teacher effectiveness and pupil motivation are measured, no honest, equitable standards will ever be established. First, let us start educating at a local level where the teacher-physician can best determine the needs. Then let the physician develop his new skills and knowledge both locally and with well-chosen meetings.

Lastly, let us evaluate the effectiveness of this training in the only way possible—by improved patient care.

Doctor Rick


Doctor Vanselow

Neal A. Vanselow, MD
Ann Arbor

There recently has been increasing pressure from the government and the public to assure that quality medical care is available to all citizens.

One result has been the development or advocacy of programs to assure the competence of the individual practitioner. New York, for example, requires that its physicians meet certain continuing medical education requirements for participation in the state Medicaid program. In Michigan a high official of the State Health Department has said that the matter of quality control of physicians is simple, adding that our state government is already programming a computer to provide questions which form the basis for a mandatory relicensure examination!

In view of the above, there has been vigorous debate within our profession regarding the best method of assuring physician competence without being arbitrary or unduly restrictive. A number of innovative methods have been introduced. The American Academy of Family Practice has continuing education requirements for membership, the American Board of Family Practice requires periodic re-examination for certification, and over 20 voluntary self-assessment examinations are being offered by medical specialty societies. In addition, the American Medical Association has developed a Physician's Recognition Award program and some hospitals have developed programs of medical audit and peer review.

All of the above techniques contain at least one of the following two weaknesses—either they are purely voluntary or they apply to only a small fraction of the physician population. Few hospitals have comprehensive medical audit or peer review programs. In most states a physician can continue to practice without belonging to a specialty society, undergoing examination by a specialty board, participating in a self-assessment examination, or engaging in any sort of continuing medical education activity.

Other proposals include the suggestion that each physician be required to take a written examination every three to five years as a prerequisite to relicensure. Medical educators have generally opposed this approach since written examinations emphasize measurement of factual knowledge alone, and are a poor method of determining competence to practice medicine. More interest has been shown in compulsory programs of medical audit in which a physician's performance is measured by reviewing the medical records of patients he has treated. At the present time, however, these programs are time-consuming, expensive, and are usually applicable only to hospitalized patients.

A number of state medical societies have taken steps to promote competence by requiring participation in postgraduate education for continued society membership. Such programs are operative in Oregon, Pennsylvania, Arizona, and Massachusetts, but obviously do not apply to non-members. New Mexico has gone one step further and has required all physicians to show proof of participation in continuing medical education for relicensure.

The Postgraduate Education Committee of the Michigan State Medical Society has considered the alternatives listed above and has rejected the proposal that participation in postgraduate education be tied to M.S.M.S. membership. Non-members of M.S.M.S. would not be affected by such a plan, and members who did not meet the requirements would be forced to leave the society. The latter move would not prevent them from practicing but would place them beyond the influence of organized medicine.

It seems more logical to tie participation in continuing education to reregistration or relicensure, a move recommended by the Postgraduate Education Committee and now under study by a Task Force of the House of Delegates. While it can be argued that *participation* in postgraduate education does not absolutely assure competence, at least *all* physicians in Michigan would be required to expose themselves to educational activities throughout the duration of their active practice.

I believe that every three to five years each physician in Michigan should be required, as a prerequisite for reregistration, to provide the State Board of Registration in Medicine with evidence of participation in continuing medical education. A number of state societies have developed criteria for such participation and these could be modified as necessary for use in Michigan. In general, credit would be given for a wide variety of educational activities ranging from formal postgraduate courses and hospital meetings to journal reading and resident teaching. As an alternative, physicians who wished could submit to an audit of their medical records by an appropriate M.S.M.S. committee.

While the above approach may be a departure from our traditional methods, it appears to be the fairest and most flexible of the alternatives available. It seems high time that we take the initiative in this area of great public interest before those who are less qualified take it for us.

MICHIGAN
DEPARTMENT
OF PUBLIC
HEALTH

Monthly Surveillance Report

Cases of Certain Diseases Reported
To the Michigan Department of Public Health
For the Four-Week Period Ending April 28, 1972

	1972 This 4-Week Period	**1971 Same 4-Week Period**	**1972 Total To Above Date**	**1971 Total Same Date**	**Total Cases for 1971**
Rubella	192	477	775	1,379	2,955
Congenital Rubella Syndrome	0	0	0	1	1
Measles	329	390	1,039	765	2,659
Whooping Cough	5	6	40	33	140
Diphtheria	1	0	1	0	1
Mumps	425	1,481	1,726	6,337	10,748
Scarlet Fever & Strep Sore Throat	819	1,019	5,105	5,673	11,244
Tetanus	0	0	0	0	7
Poliomyelitis (paralytic)	0	0	0	0	0
Hepatitis	300	380	1,553	1,743	4,828
Salmonellosis (other than S. typhi)	53	54	226	207	691
Typhoid Fever (S. typhi)	2	1	3	2	10
Shigellosis	24	9	159	66	295
Aseptic Meningitis	3	10	23	39	239
Encephalitis	5	11	25	43	108
Meningococcic Meningitis	5	7	20	32	64
H. Influenza Meningitis	7	6	27	26	82
Tuberculosis	169	164	608	626	1,824
Syphilis	364	293	1,666	1,283	4,689
Gonorrhea	1,674	1,557	7,073	6,307	22,115

Information can be supplied by the local health department on the local incidence of disease.

Maurice Reizen, M.D., Director
Michigan Department of Public Health

PROTEIN CONTENT/ 1 Cup Prepared Soup*

Bean with Bacon	7.7	Green Pea	7.8
Beef	9.1	Hot Dog Bean	8.6
Chicken Broth	8.4	Oyster Stew	6.0
Chicken 'N Dumplings	6.6	Pepper Pot	6.9
Chili Beef	7.0	Split Pea with Ham	11.6
Consomme	5.6	Vegetable Beef	5.7

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the 3 phases of Eve

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Ovulen®

Each white tablet contains: ethynodiol diacetate 1 mg./mestranol 0.1 mg.

References **1.** Editorial Oral Contraceptives Which Pill for Which Patient? Patient Care *3*:90-115 (Feb.) 1969 and *4* 135-145 (June 15) 1970 **2.** Greenblatt, R. B.. Progestational Agents in Clinical Practice, Med Sci *18* 37-49 (May) 1967 **3.** Kistner, R W. Gynecology: Principles and Practice, ed. 2, Chicago, Year Book Medical Publishers, 1971 **4.** Kistner, R W: The Pill: Facts and Fallacies About Today's Oral Contraceptives, New York, Delacorte Press, 1968 **5.** Nelson, J H Clinical Evaluation of Side Effects of Current Oral Contraceptives, J Reprod Med 6 50-55 (Feb) 1971 **6.** Orr, G W Oral Progestational Agents: Therapy and Complications, S. Dakota J Med. *22*:11-17 (Jan) 1969

SEARLE

For brief summary of prescribing information
see following page.

the Demulen phase

Many women* who secrete **more estrogen** than most do well on a pill with lower estrogen activity and an increased progestogen overbalance.

(*Typical clues—shorter, plumper, full-breasted, with glowing skin and no wrinkles. Vaginal cytology slide "pink.")

Some women with special conditions that may be aggravated by higher estrogen-activity products may do better on this ratio.

Demulen combines minimal estrogenic activity with a moderate ratio of progestogen overbalance. It is particularly well suited to the young when low-dose (activity) is preferred. Demulen offers little risk of the most potent progestogen side effects; early breakthrough bleeding is often transient.

Demulen®

Each white tablet contains: ethynodiol diacetate 1 mg./ethinyl estradiol 50 mcg

Each pink tablet in Ovulen-28® and Demulen®-28 is a placebo, containing no active ingredients.

Both Ovulen and Demulen are available in 21- and 28-pill schedules.

the Enovid-E phase

Some women* who secrete **less estrogen** than most do best on a pill with a moderate estrogen overbalance.

(*Typical clues—oily complexion, acne, hirsutism, masculinity, flat chest. Vaginal cytology slide—"blue.")

Patients with estrogen deficiency may show:

premenopausal syndrome	intermittent depression
early-cycle bleeding	increased appetite
scanty menses	steady weight gain

vaginal candidiasis

Enovid-E not only provides increased estrogenic activity with low progestogen activity, but also contains the only progestogen that is not antiestrogenic. Therefore it offers less risk of high-dose progestogen side effects.

Enovid-E®

Each tablet contains: norethynodrel 2.5 mg./mestranol 0.1 mg.

Oral contraceptives are complex medications and, after reference to the prescribing information, should be prescribed with discriminating care.

for the 3 phases of Eve:

a family of O.C. products

Ovulen®

Each white tablet contains:
ethynodiol diacetate 1 mg./mestranol 0.1 mg.

Demulen®

Each white tablet contains:
ethynodiol diacetate 1 mg./ethinyl estradiol 50 mcg.

Each pink tablet in Ovulen-28® and Demulen®-28 is a placebo, containing no active ingredients.

Actions—Ovulen and Demulen act to prevent ovulation by inhibiting the output of gonadotropins from the pituitary gland. Ovulen and Demulen depress the output of both the follicle-stimulating hormone (FSH) and the luteinizing hormone (LH).

Special note—Oral contraceptives have been marketed in the United States since 1960. Reported pregnancy rates vary from product to product. The effectiveness of the sequential products appears to be somewhat lower than that of the combination products. Both types provide almost completely effective contraception.

An increased risk of thromboembolic disease associated with the use of hormonal contraceptives has now been shown in studies conducted in both Great Britain and the United States. Other risks, such as those of elevated blood pressure, liver disease and reduced tolerance to carbohydrates, have not been quantitated with precision.

Long-term administration of both natural and synthetic estrogens in subprimate animal species in multiples of the human dose increases the frequency of some animal carcinomas. These data cannot be transposed directly to man. The possible carcinogenicity due to the estrogens can be neither affirmed nor refuted at this time. Close clinical surveillance of all women taking oral contraceptives must be continued.

Indication—Ovulen and Demulen are indicated for oral contraception.

Contraindications—Patients with thrombophlebitis, thromboembolic disorders, cerebral apoplexy or a past history of these conditions, markedly impaired liver function, known or suspected carcinoma of the breast, known or suspected estrogen-dependent neoplasia and undiagnosed abnormal genital bleeding.

Warnings—The physician should be alert to the earliest manifestations of thrombotic disorders (thrombophlebitis, cerebrovascular disorders, pulmonary embolism and retinal thrombosis). Should any of these occur or be suspected the drug should be discontinued immediately.

Retrospective studies of morbidity and mortality conducted in Great Britain and studies of morbidity in the United States have shown a statistically significant association between thrombophlebitis, pulmonary embolism, and cerebral thrombosis and embolism and the use of oral contraceptives. There have been three principal studies in Britain[1-3] leading to this conclusion, and one[4] in this country. The estimate of the relative risk of thromboembolism in the study by Vessey and Doll[3] was about sevenfold, while Sartwell and associates[4] in the United States found a relative risk of 4.4, meaning that the users are several times as likely to undergo thromboembolic disease without evident cause as nonusers. The American study also indicated that the risk did not persist after discontinuation of administration and that it was not enhanced by long-continued administration. The American study was not designed to evaluate a difference between products. However, the study suggested that there might be an increased risk of thromboembolic disease in users of sequential products. This risk cannot be quantitated, and further studies to confirm this finding are desirable.

Discontinue medication pending examination if there is sudden partial or complete loss of vision, or if there is a sudden onset of proptosis, diplopia or migraine. If examination reveals papilledema or retinal vascular lesions medication should be withdrawn.

Since the safety of Ovulen and Demulen in pregnancy has not been demonstrated, it is recommended that for any patient who has missed two consecutive periods pregnancy should be ruled out before continuing the contraceptive regimen. If the patient has not adhered to the prescribed schedule the possibility of pregnancy should be considered at the time of the first missed period.

A small fraction of the hormonal agents in oral contraceptives has been identified in the milk of mothers receiving these drugs. The long-range effect to the nursing infant cannot be determined at this time.

Precautions—The pretreatment and periodic physical examinations should include special reference to the breasts and pelvic organs, including a Papanicolaou smear since estrogens have been known to produce tumors, some of them malignant, in five species of subprimate animals. Endocrine and possibly liver function tests may be affected by treatment with Ovulen or Demulen. Therefore, if such tests are abnormal in a patient taking Ovulen or Demulen, it is recommended that they be repeated after the drug has been withdrawn for two months. Under the influence of progestogen-estrogen preparations preexisting uterine fibromyomas may increase in size. Because these agents may cause some degree of fluid retention, conditions which might be influenced by this factor, such as epilepsy, migraine, asthma, cardiac or renal dysfunction, require careful observation. In breakthrough bleeding, and in all cases of irregular bleeding per vaginam, nonfunctional causes should be borne in mind. In undiagnosed bleeding per vaginam adequate diagnostic measures are indicated. Patients with a history of psychic depression should be carefully observed and the drug discontinued if the depression recurs to a serious degree. Any possible influence of prolonged Ovulen or Demulen therapy on pituitary, ovarian, adrenal, hepatic or uterine function awaits further study. A decrease in glucose tolerance has been observed in a significant percentage of patients on oral contraceptives. The mechanism of this decrease is obscure. For this reason, diabetic patients should be carefully observed while receiving Ovulen or Demulen therapy. The age of the patient constitutes no absolute limiting factor, although treatment with Ovulen or Demulen may mask the onset of the climacteric. The pathologist should be advised of Ovulen or Demulen therapy when relevant specimens are submitted. Susceptible women may experience an increase in blood pressure following administration of contraceptive steroids.

Adverse reactions observed in patients receiving oral contraceptives—A statistically significant association has been demonstrated between use of oral contraceptives and the following serious adverse reactions: thrombophlebitis, pulmonary embolism and cerebral thrombosis.

Although available evidence is suggestive of an association, such a relationship has been neither confirmed nor refuted for the following serious adverse reactions: neuro-ocular lesions, e.g., retinal thrombosis and optic neuritis.

The following adverse reactions are known to occur in patients receiving oral contraceptives: nausea, vomiting, gastrointestinal symptoms (such as abdominal cramps and bloating), breakthrough bleeding, spotting, change in menstrual flow, amenorrhea during and after treatment, edema, chloasma or melasma, breast changes (tenderness, enlargement and secretion), change in weight (increase or decrease), changes in cervical erosion and cervical secretions, suppression of lactation when given immediately post partum, cholestatic jaundice, migraine, rash (allergic), rise in blood pressure in susceptible individuals and mental depression.

Although the following adverse reactions have been reported in users of oral contraceptives, an association has been neither confirmed nor refuted: anovulation post treatment, premenstrual-like syndrome, changes in libido, changes in appetite, cystitis-like syndrome, headache, nervousness, dizziness, fatigue, backache, hirsutism, loss of scalp hair, erythema multiforme, erythema nodosum, hemorrhagic eruption and itching.

The following laboratory results may be altered by the use of oral contraceptives: hepatic function: increased sulfobromophthalein retention and other tests; coagulation tests: increase in prothrombin, Factors VII, VIII, IX and X; thyroid function: increase in PBI and butanol extractable protein bound iodine, and decrease in T^3 uptake values; metyrapone test and pregnanediol determination.

References: 1. Royal College of General Practitioners: Oral Contraception and Thrombo-Embolic Disease, J. Coll. Gen. Pract. *13*:267-279 (May) 1967. **2.** Inman, W. H. W., and Vessey, M. P.: Investigation of Deaths from Pulmonary, Coronary, and Cerebral Thrombosis and Embolism in Women of Child-Bearing Age, Brit. Med. J. *2*:193-199 (April 27) 1968. **3.** Vessey, M. P., and Doll, R.: Investigation of Relation Between Use of Oral Contraceptives and Thromboembolic Disease. A Further Report, Brit. Med. J. *2*:651-657 (June 14) 1969. **4.** Sartwell, P. E.; Masi, A. T.; Arthes, F. G.; Greene, G. R., and Smith, H. E.: Thromboembolism and Oral Contraceptives: An Epidemiologic Case-Control Study, Amer. J. Epidem. *90*:365-380 (Nov.) 1969.

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norethynodrel 2.5 mg./mestranol 0.1 mg.

Actions—Enovid-E acts to prevent ovulation by inhibiting the output of gonadotropins from the pituitary gland. Enovid-E depresses the output of both the follicle-stimulating hormone (FSH) and the luteinizing hormone (LH).

Indication—Enovid-E is indicated for oral contraception.

The *Special Note, Contraindications, Warnings, Precautions* and *Adverse Reactions* listed above for Ovulen and Demulen are applicable to Enovid-E and should be observed when prescribing Enovid-E.

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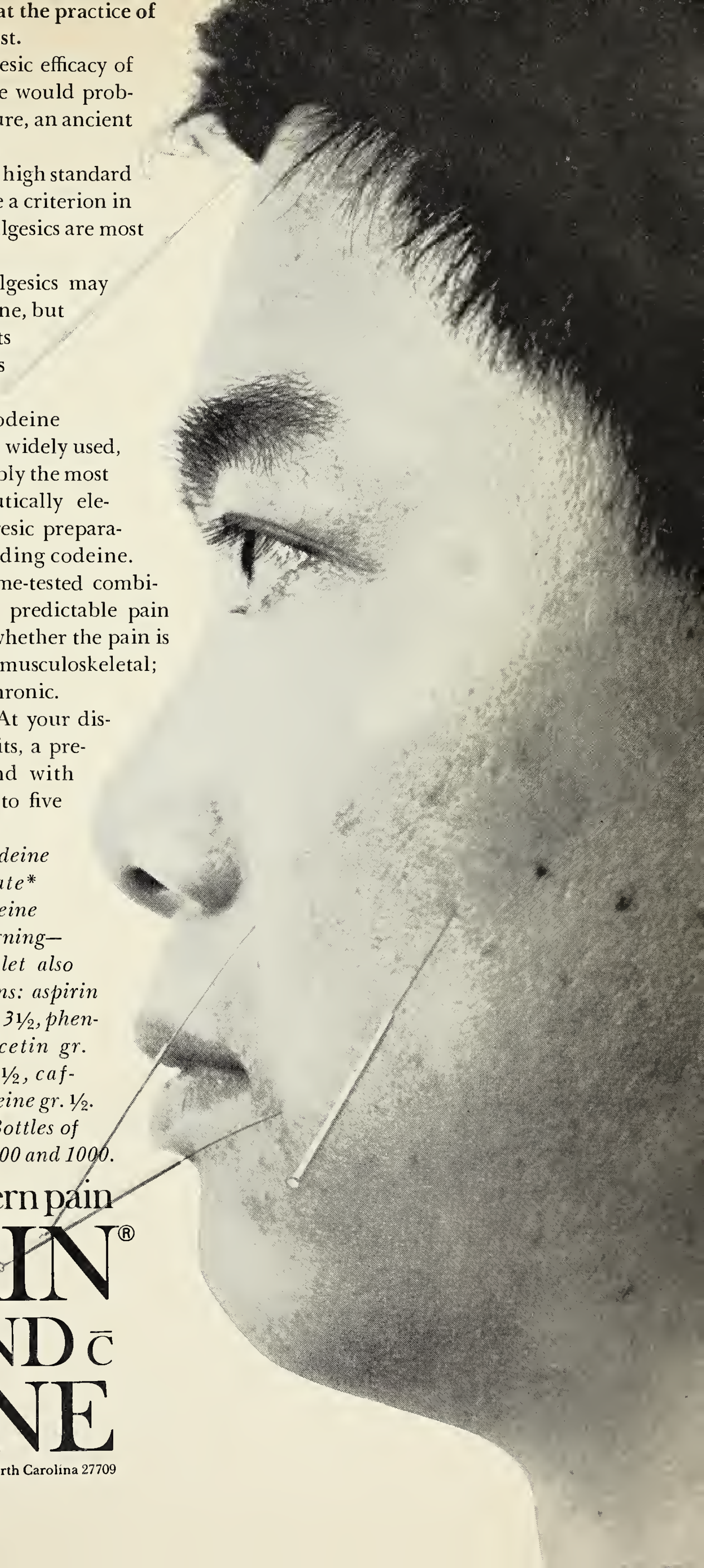

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Contraindications: Hypersensitivity to barbiturates or belladonna alkaloids, glaucoma, advanced renal or hepatic disease.
Precautions: Administer with caution to patients with incipient glaucoma, bladder neck obstruction or urinary bladder atony. Prolonged use of barbiturates may be habit-forming.
Side effects: Blurred vision, dry mouth, dysuria, and other atropine-like side effects may occur at high doses, but are only rarely noted at recommended dosages.
Dosage: Adults: One or two tablets three or four times daily. Dosage can be adjusted depending on diagnosis and severity of symptoms. Children 2 to 12 years: One half or one tablet three or four times daily. Tablets may be chewed or swallowed with liquids.

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County in the spotlight

Ingham doctors take the initiative to meet, talk with their legislators

By Judith Marr
Managing Editor

At noon on the fourth Thursday of each month this year, legislators from the Ingham, Clinton and Eaton County areas have made the short walk across the street from their Capitol Building offices to Lansing's Olds Plaza Hotel.

There, in a small third floor meeting room, they've shared a buffet luncheon of cold cuts, soup and salad with Ingham County doctors who extend the standing invitation.

As the meetings progress, one specially-invited legislator, usually from another area of the state, outlines bills pending on a particular subject of medical interest. That legislator is usually the bills' sponsor or chairman of the committee which will lead discussion.

Thus, the Ingham doctors this year have heard Rep. J. Robert Traxler (D-Bay City) on malpractice legislation; Rep. James Farnsworth (R-Plainwell), Rep. Raymond Kehres (D-Monroe) on uniform fee schedules and Rep. Jackie Vaughn III (D-Detroit) on physicians' assistants.

Here are Doctor Payne's suggestions for other county medical societies which might initiate a series of meetings with their local legislators:

1) It is most important to make personal contacts and telephone calls to the legislators you invite to your meetings. (Each month the Ingham physicians send letters which are followed up with personal telephone calls.)

2) If possible, work with local physicians who have served as Doctors of the Week in Lansing, as their first-hand acquaintance with legislators is a decided advantage.

3) Arrange the meetings around the legislative schedule and sessions and *on a regular basis.*

4) Keep the meetings informal but structured (at least have a subject for each meeting, though that subject doesn't always have to be medical).

5) Lean heavily on the MSMS Government Relations staff and your county executive secretary, if you have one. "Without them, such a program is impossible," says Doctor Payne.

Other topics have included Medicaid fees, the Medical Practice Act and vaccination requirements.

Following a 10-minute presentation, open discussion prevails, and conversation flows into other legislative and medical areas of concern. The meetings break up about 1:30 p.m. and the legislators make their way back to the Capitol.

These monthly meetings are the project of Thomas Payne, MD, Lansing, legislative chairman for the Ingham County Medical Society. And they represent one of the most successful and worthwhile activities being carried out around the state by county medical societies.

Doctor Payne explains that his idea grew out of his 1970 experience with the MSMS program to bring Michigan physicians to Lansing for a week of meeting and talking with legislators. Doctor Payne also took ideas from the Kent County Medical Society's similar activity of monthly meetings with local legislators.

"I got to know most of our local lawmakers during my Doctor of the Week experience," says Doctor Payne. "I thought it would be nice to work on a regular basis with them."

He sent letters to Ingham, Eaton and Clinton county legislators inviting them to the first meeting in January, 1971, and personally went down to the Capitol to introduce himself to those he hadn't met and to invite them to attend. The luncheon sessions were held seven times during 1971 and resumed again this January. They will recess during the summer months and there probably will be one more this year in the fall, says Doctor Payne.

Local legislators involved on a regular basis include two senators and six representatives. Doctor Payne's legislative committee equals that number, and the group swells with interested county society members, legislators from other areas and MSMS staff members.

"I wish every county society in the state would do this," says Bruce Ambrose, manager, MSMS Government Affairs Department, who has given his staff's support to the Ingham program. He and Doctor Payne sit down before each monthly meeting to select the topic.

"The Ingham program has been very successful and it represents a minimum of imposition on the legislator's time," Mr. Ambrose says.

The lawmakers appreciate the opportunity to meet with the doctors, Mr. Ambrose reports. "Rep. Douglas Trezise (R-Owosso), tells me he goes to the meetings for information and because he doesn't see his doctor-constituents at home."

Rep. Earl Nelson (D-Lansing), in a letter to Doctor Payne May 9, said, "The opportunity to exchange information at the monthly meetings which you have convened has been very helpful to me. I believe this kind of political action is in the best spirit of a proper relationship between organizations and legislators."

Doctor Payne emphasizes that the purpose is to gather and disseminate information.

"I never thought before meeting the legislators that these guys have to be experts not only in medical affairs, but in such things as drainage systems and taxes—the whole scope of social affairs," Doctor Payne continues.

"And not only do the legislators not know of our medical concerns, but I know many of my committee members are hopelessly ignorant of what's in the legislative hopper downtown.

"I think our meetings have made the legislators more aware of how their decisions can affect the practice of medicine," he adds.

And another effect has been that members of the Ingham County Medical Society, drawn to the meetings over particular subjects, have become interested new members of Doctor Payne's committee.

Northern physicians give financial support to environmental projects

An active part in the fight to protect our environment is being taken by members of the Northern Michigan Medical Society. The society recently made a contribution of $200 from membership dues to support a suit being waged by John Tanton, MD, Petoskey, against the Michigan Department of Natural Resources.

Doctor Tanton's suit has stopped building of a dam across Monroe Creek near Charlevoix to create a man-made lake as the center of a large development. The $200 went to the Michigan Environmental Protection Foundation, a northern Michigan organization created specifically to fund lawsuits on environmental issues.

Doctor Tanton expects a decision late in May from the Charlevoix Circuit Court.

The Northern Michigan society also contributed $500 to help bring Stewart Udall, former U.S. Secretary of the Interior, to a two-day community-wide Earth Fair April 26-27 in Petoskey. Mr. Udall spoke the evening of the 26th in the Petoskey Junior High School Auditorium.

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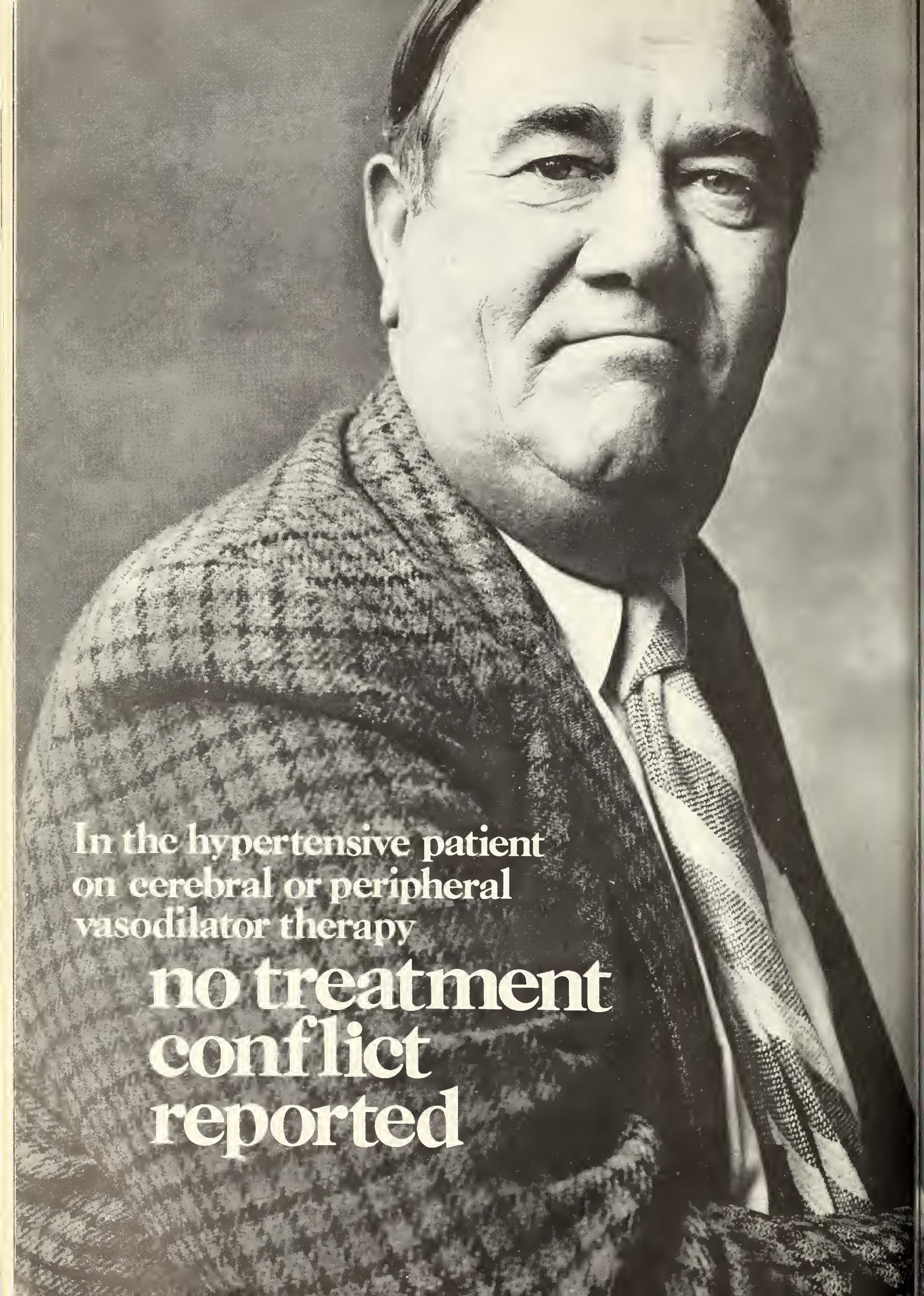
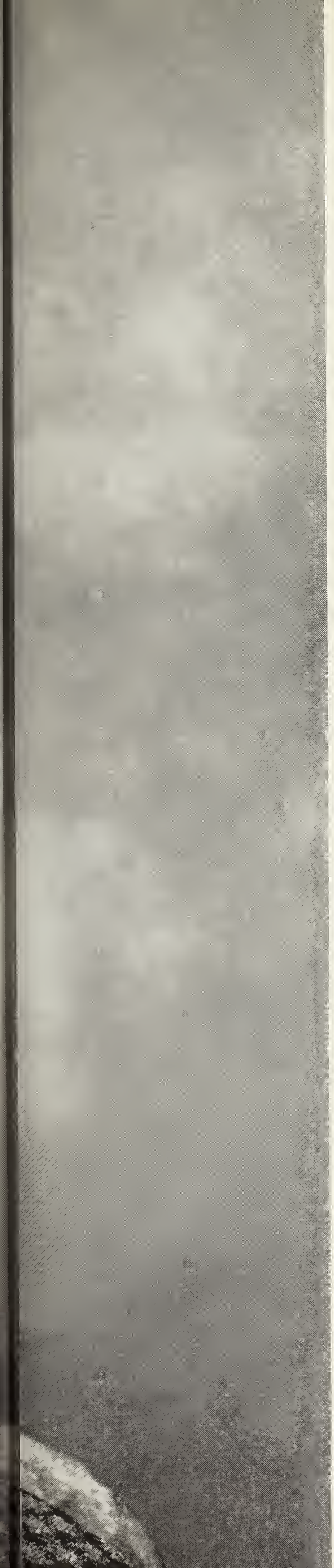

In the hypertensive patient on cerebral or peripheral vasodilator therapy
no treatment conflict reported



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Although not all clinicians agree on the value of vasodilators in vascular disease, several investigators[1-4] have reported favorably on the effects of isoxsuprine. Effects have been demonstrated both by objective measurement[2,4] and observation of clinical improvement.[1,3] **Composition:** VASODĪLAN tablets, isoxsuprine HCl, 10 mg. and 20 mg. VASODĪLAN syrup, isoxsuprine HCl, 10 mg. per 5 ml. teaspoonful. **Indications:** *In cerebral vascular disorders,* for relief of symptoms due to vascular insufficiency associated with various conditions such as arteriosclerosis and hypertension. *In peripheral vascular disorders,* for relief of symptoms such as intermittent claudication, coldness, numbness, pain and cramping of the extremities—in the management of arteriosclerosis obliterans, diabetic vascular diseases, thromboangiitis obliterans (Buerger's disease), Raynaud's disease, postphlebitic conditions, acroparesthesia, frostbite syndrome and ulcers of the extremities (arteriosclerotic, diabetic, thrombotic). **Dosage and Administration:** In peripheral and cerebral vascular disorders—10 to 20 mg. three or four times daily. **Contraindications and Cautions:** There are no known contraindications to oral use when administered in recommended doses. Should not be given immediately postpartum or in the presence of arterial bleeding. **Adverse Reactions:** On rare occasions, oral administration of the drug has been associated in time with the occurrence of severe rash. When rash appears, the drug should be discontinued. Occasional overdosage effects such as transient palpitation or dizziness are usually controlled by reducing the dose. **Supplied:** *Tablets,* 10 mg.—bottles of 100 and 1000, and Unit Dose; 20 mg.—bottles of 100 and 500. *Syrup,* 10 mg. per 5 ml. teaspoonful—bottles of 1 pint. **References:** 1. Clarkson, I. S., and LePere, D. M.: Angiology *11*:190-192 (June) 1960. 2. Horton, G. E., and Johnson, P. C., Jr.: Angiology *15*:70-74 (Feb.) 1964. 3. Dhrymiotis, A. D., and Whittier, J. R.: Curr. Ther. Res. *4*:124-128 (April) 1962. 4. Whittier, J. R.: Angiology *15*:82-87 (Feb.) 1964.

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Tuscola	E. N. Elmendorf, II, MD	Mitchell Urban, MD, Caro State Hospital, Caro 48723
Van Buren	Adelbert L. Stagg, MD	H. David Fenske, MD, 412 Phoenix St., South Haven 49090
Washtenaw	Dean P. Carron, MD	Robert S. Ideson, II, MD, 2200 Vinewood Ave., Ann Arbor 48104
Wayne	Homer M. Smathers, MD	Ned I. Chalat, MD, 929 Fisher Bldg., Detroit 48202
Wexford-Missaukee	Kenneth A. Kleyn, MD	George F. Wagoner, MD, 530 Cobb St., Cadillac 49601

Oakland society taking an inner look

The Oakland County Medical Society has a new committee to review the obligations and goals of the society and to evaluate the society's organization.

Chairman of the committee is Fred W. Bryant, MD, Royal Oak. He will lead the committee in appraising the duties of the various officers and committees, and to help improve the society's relations with other medical organizations.

Saginaw physicians planning art exhibit

The new Art Committee of the Saginaw County Medical Society is announcing plans for a fall exhibit of works of art by members and families of the Saginaw medical, dental and osteopathic professions and their families. The exhibit will be under the direction of the medical auxiliary and will be held at the Saginaw Museum in September. Categories will include oil painting, water colors, photography, ceramics and sculpture.

County scenes

Wayne Society honors Beaumont lecturer, E. S. Gurdjian, MD

E. S. Gurdjian, MD, Detroit, received a citation from the Wayne County Medical Society at the Beaumont Lecture which he presented this year.

The citation declared that the "Wayne County Medical Society gratefully acknowledges the many years of inspirational and dedicated teaching, devotion to his patients, and outstanding research in the field of neurosurgery."

The Beaumont lecture was about "Head Injuries from Antiquity to the Present." Doctor Gurdjian also traced the development of seat belts, inflatable bags and predicted that "the nation will have a car that will protect the driver and passengers with little or no injury after a bad accident in six to eight years."

The Beaumont Lecture usually features medical authorities from other states, but occasionally honors such a nationally-known expert as Doctor Gurdjian.

Bay doctors make $2,000 loan to WSU med student

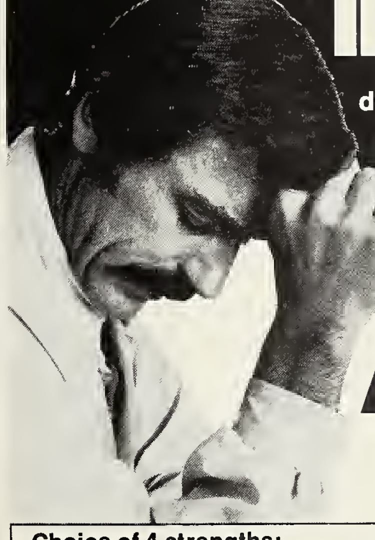
An initial loan of $2,000 has been made by the Bay-Arenac-Iosco counties medical society to a Wayne State University medical student, in hopes that he will practice in Bay City on completion of his medical training.

The loan is the first to be made by the Bay County Foundation for Medical Progress, established with donations of Bay County citizens made during the 1964 twin-dose sugar cube polio immunization.

The student recipient, who may obtain a maximum of $3,000 per year from the foundation, is one of six medical students from around the state who spent a day recently in Bay City meeting with physicians and becoming acquainted with the area.

The Bay physicians first met the student at the recent Michigan Community-Medical Student Day at Wayne State University, when they interviewed 30 interested medical students.

The effort was led by the Bay county society's Medical Procurement Committee, chaired by Richard Bickham, MD.



The treatment of
impotence
due to androgenic deficiency in the American male. The concept of chemotherapy plus the physician's psychological support is confirmed as effective therapy.

NEW CLINICAL STUDY

The Treatment of Impotence with Methyltestosterone Thyroid (100 patients—Double Blind Study) T. Jakobovits
Fertility and Sterility, January 1970
Official Journal of the American Fertility Society

Android®
(thyroid-androgen) tablets

Double-Blind Study and Type of Patient:
100 patients suffering from impotence. Of the patients receiving the active medication (Android) a favourable response was seen in 78%. This compares with 40% on placebo. Although psychotherapy is indicated in patients suffering from functional impotence the concomitant role of chemotherapy (Android) cannot be disputed.

Choice of 4 strengths:

Android	Android-HP HIGN POTENCY	Android-X EXTRA HIGH POTENCY	Android-Plus WITH NIGN POTENCY B-COMPLEX ANO VITAMIN C
Each yellow tablet contains:	*Each red tablet contains:*	*Each orange tablet contains:*	*Each white tablet contains:*
Methyl Testosterone ..2.5 mg.	Methyl Testosterone ..5.0 mg.	Methyl Testosterone .12.5 mg.	Methyl Testosterone ..2.5 mg.
Thyroid Ext. (1/6 gr.) ..10 mg.	Thyroid Ext. (½ gr.) ...30 mg.	Thyroid Ext. (1 gr.) ....64 mg.	Thyroid Ext. (¼ gr.) ...15 mg.
Glutamic Acid ....50 mg.	Glutamic Acid ....50 mg.	Glutamic Acid ....50 mg.	Ascorbic Acid (Vit. C) .250 mg.
Thiamine HCL ....10 mg.	Thiamine HCL ....10 mg.	Thiamine HCL ....10 mg.	Thiamine HCL ....25 mg.
Dose: 1 tablet 3 times daily.	*Dose:* 1 tablet 3 times daily.	*Dose:* 1 or 2 tablets daily.	Glutamic Acid ....100 mg.
Available: Bottles of 100, 500, 1000.	*Available:* Bottles of 100, 500, 1000.	*Available:* Bottles of 60, 500.	Pyridoxine HCL ....5 mg.
REFER TO PDR			Niacinamide ....75 mg.
			Calcium Pantothenate .10 mg.
			Vitamin B-12 ....2.5 mcg.
			Riboflavin ....5 mg.
			Dose: 2 tablets daily.
			Available: Bottles of 60, 500.

Contraindications: Android is contraindicated in patients with prostatic carcinoma, severe cardiorenal disease and severe persistent hypercalcemia, coronary heart disease and hyperthyroidism. Occasional cases of jaundice with plugging biliary canaliculi have occurred with average doses of Methyl Testosterone. Thyroid is not to be used in heart disease and hypertension.

Warnings: Large dosages may cause anorexia, nausea, vomiting abdominal pain, diarrhea, headache, dizziness, lethargy, paresthesia, skin eruptions, loss of libido in males, dysuria, edema, congestive heart failure and mammary carcinoma in males.

Precautions: If hypothyroidism is accompanied by adrenal insufficiency the latter must be corrected prior to and during thyroid administration.

Adverse Reactions: Since Androgens, in general, tend to promote retention of sodium and water, patients receiving Methyl Testosterone, in particular elderly patients, should be observed for edema.

Hypercalcemia may occur, particularly in immobilized patients: use of Testosterone should be discontinued as soon as hypercalcemia is detected.

References: 1. **Montesano, P., and Evangelista, I.** Methyltestosterone-thyroid treatment of sexua impotence. Clin Med 12:69, 1966. 2. **Dublin, M. F.** Treatment of impotence with methyltestosterone thyroid compound. West Med 5:67, 1964. 3. **Titeff, A. S.** Methyltestosterone-thyroid in treating impotence Gen Prac 25:6, 1962. 4. **Hellman, L., Bradlow, H. L., Zumoff, B., Fukushima, D. K., and Gallagher, T.** Thyroid-androgen interrelations and the hypocholesteremic effect of androsterone. J Clin Endocr 19:936 1959. 5. **Farris, E. J., and Colton, S. W.** Effects of L-thyroxine and liothyronine on spermatogenesi J Urol 79:863, 1958. 6. **Osol, A., and Farrar, G. E.** United States Dispensatory (ed. 25). Lippincott, Phila delphia, 1955, p. 1432. 7. **Wershub, L. P.** Sexual Impotence in the Male. Thomas, Springfield, Ill., 1959, pp. 79-99.

Write for literature and samples: BROWN **THE BROWN PHARMACEUTICAL CO., INC.** 2500 West 6th Street, Los Angeles, California 9005

Problems of health care delivery tackled by Ingham MDs

The Ingham County Medical Society is making a major effort to define and solve problems in the delivery of health care to the Lansing area.

The society has a new Ad Hoc Committee on Patient Care, which formed in September and includes representatives of the MSU College of Human Medicine and local practicing physicians. Area osteopaths are also invited to take part.

In addition, Ingham Executive Director John B. Kantner has invited the Lansing doctors to stopgap local problems through a series of short-term services. He suggests, in a box in The Ingham *Bulletin*, that doctors accept an occasional new family as patients, accept a specified number of new Medicaid and ADC patients, give a transient or temporary resident shots for travel, give blood tests for marriage licenses, give a physical examination for a job, give a specified number of camp or school physicals, volunteer for a two-hour period one afternoon a week in the fall to cover junior high football games.

"The problem is just not enough doctors," Mr. Kantner says. "But I hope to relieve the public's problems, if not by giving them a family doctor, at least by giving them someone to help solve their immediate problems."

The ad hoc committee is working for more permanent solutions under the basic premises that the university may participate in the full spectrum of community care, that university participation be accomplished with the cooperation of local physicians, and that multiple methods of medical practice should compete freely.

Children poisoned by eating lead paint treated by Genesee doctors

Flint children found by a recent survey to have an unsafe blood lead count are being evaluated and treated by members of the Genesee County Medical Society, in cooperation with the local health department and the C. S. Mott Children's Health Center.

Through a blood screening test delivered to 103 children late in October, those with possible lead paint poisoning were identified. The tests were given in 30 smaller cities around the country by a HEW team, to determine the magnitude and geographic distribution of the lead paint hazard.

Pre-Sate ®
(chlorphentermine HCl)

CAUTION: Federal law prohibits dispensing without prescription.

Indications: Pre-Sate (chlorphentermine hydrochloride) is indicated in exogenous obesity, as a short term (*i.e.*, several weeks) adjunct in a regimen of weight reduction based upon caloric restriction.

Contraindications: Glaucoma, hyperthyroidism, pheochromocytoma, hypersensitivity to sympathomimetic amines, and agitated states. Pre-Sate (chlorphentermine hydrochloride) is also contraindicated in patients with a history of drug abuse or symptomatic cardiovascular disease of the following types: advanced arteriosclerosis, severe coronary artery disease, moderate to severe hypertension, or cardiac conduction abnormalities with danger of arrhythmias. The drug is also contraindicated during or within 14 days following administration of monamine oxidase inhibitors, since hypertensive crises may result.

Warnings: When weight loss is unsatisfactory the recommended dosage should not be increased in an attempt to obtain increased anorexigenic effect; discontinue the drug. Tolerance to the anorectic effect may develop. Drowsiness or stimulation may occur and may impair ability to engage in potentially hazardous activities such as operating machinery, driving a motor vehicle, or performing tasks requiring precision work or critical judgment. Therefore, such patients should be cautioned accordingly. Caution must be exercised if Pre-Sate (chlorphentermine hydrochloride) is used concomitantly with other central nervous system stimulants. There have been reports of pulmonary hypertension in patients who received related drugs.

Drug Dependence: Drugs of this type have a potential for abuse. Patients have been known to increase the intake of drugs of this type to many times the dosages recommended. In long-term controlled studies with high dosages of Pre-Sate, abrupt cessation did not result in symptoms of withdrawal.

Usage In Pregnancy: The safety of Pre-Sate (chlorphentermine hydrochloride) in human pregnancy has not yet been clearly established. The use of anorectic agents by women who are or who may become pregnant, and especially those in the first trimester of pregnancy, requires that the potential benefit be weighed against the possible hazard to mother and child. Use of the drug during lactation is not recommended. Mammalian reproductive and teratogenic studies with high multiples of the human dose have been negative.

Usage In Children: Not recommended for use in children under 12 years of age.

Precautions: In patients with diabetes mellitus there may be alteration of insulin requirements due to dietary restrictions and weight loss. Pre-Sate (chlorphentermine hydrochloride) should be used with caution when obesity complicates the management of patients with mild to moderate cardiovascular disease or diabetes mellitus, and only when dietary restriction alone has been unsuccessful in achieving desired weight reduction. In prescribing this drug for obese patients in whom it is undesirable to introduce CNS stimulation or pressor effect, the physician should be alert to the individual who may be overly sensitive to this drug. Psychologic disturbances have been reported in patients who concomitantly receive an anorexic agent and a restrictive dietary regimen.

Adverse Reactions: Central Nervous System: When CNS side effects occur, they are most often manifested as drowsiness or sedation or overstimulation and restlessness. Insomnia, dizziness, headache, euphoria, dysphoria, and tremor may also occur. Psychotic episodes, although rare, have been noted even at recommended doses. **Cardiovascular:** tachycardia, palpitation, elevation of blood pressure. **Gastrointestinal:** nausea and vomiting, diarrhea, unpleasant taste, constipation. **Endocrine:** changes in libido, impotence. **Autonomic:** dryness of mouth, sweating, mydriasis. **Allergic:** urticaria. **Genitourinary:** diuresis and, rarely, difficulty in initiating micturition. **Others**: Paresthesias, sural spasms.

Dosage and Administration: The recommended adult daily dose of Pre-Sate (chlorphentermine hydrochloride) is one tablet (equivalent to 65 mg chlorphentermine base) taken after the first meal of the day. Use in children under 12 not recommended.

Overdosage: Manifestations: Restlessness, confusion, assaultiveness, hallucinations, panic states, and hyperpyrexia may be manifestations of acute intoxication with anorectic agents. Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension, or hypotension and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Fatal poisoning usually terminates in convulsions and coma.

Management: Management of acute intoxication with sympathomimetic amines is largely symptomatic and supportive and often includes sedation with a barbiturate. If hypertension is marked, the use of a nitrate or rapidly acting alpha-receptor blocking agent should be considered. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendations in this regard.

How Supplied: Each Pre-Sate (chlorphentermine hydrochloride) tablet contains the equivalent of 65 mg chlorphentermine base; bottles of 100 and 1000 tablets.

Full information available on request.

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Division, Warner-Lambert Company
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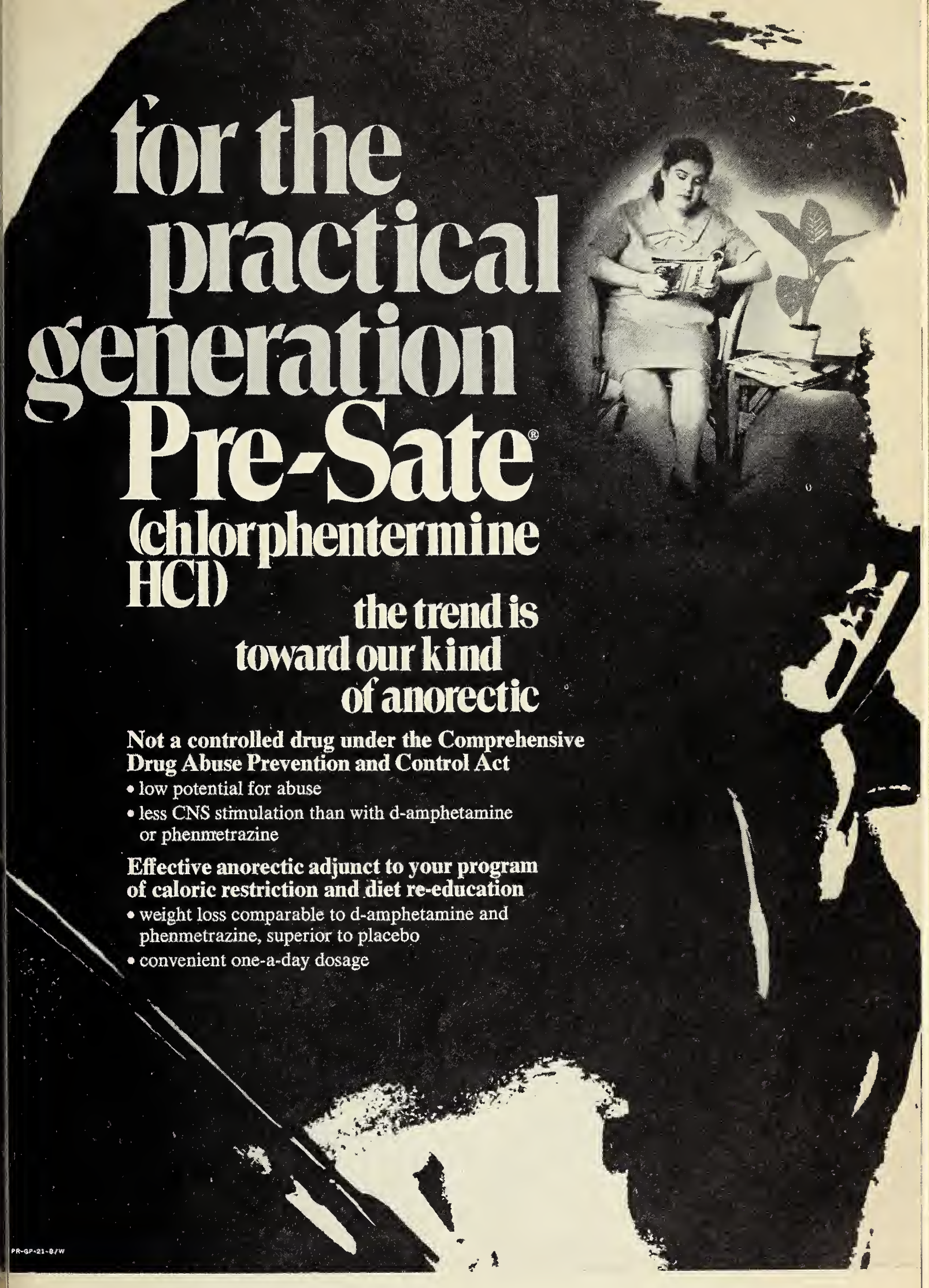

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(chlorphentermine HCl)

the trend is toward our kind of anorectic

Not a controlled drug under the Comprehensive Drug Abuse Prevention and Control Act

- low potential for abuse
- less CNS stimulation than with d-amphetamine or phenmetrazine

Effective anorectic adjunct to your program of caloric restriction and diet re-education

- weight loss comparable to d-amphetamine and phenmetrazine, superior to placebo
- convenient one-a-day dosage

PR-GP-21-8/W

Pre-Sate® (chlorphentermine HCl)...the increasingly practical appetite suppressant

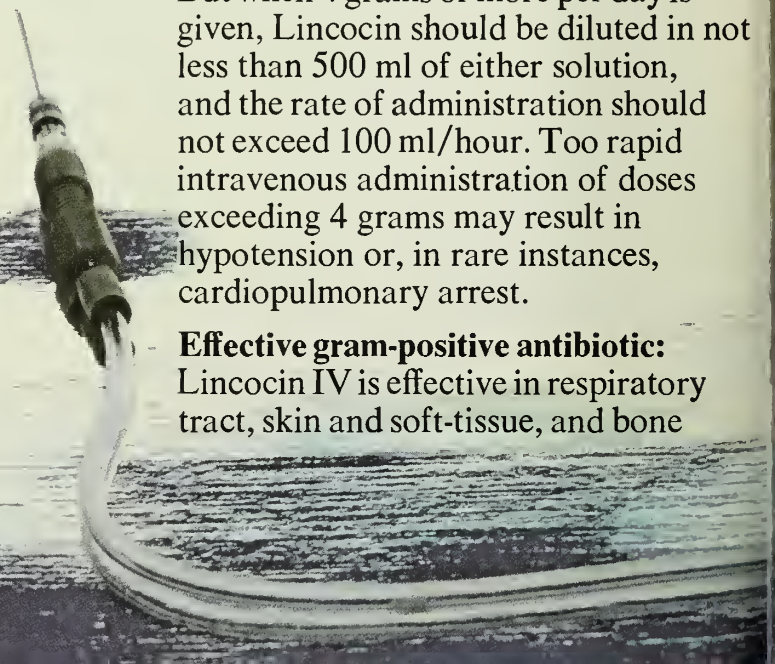
When you select this familiar antibiotic for IV infusion you have available a broad dosage range that hospitalized patients may need.

Intravenous Lincocin (lincomycin hydrochloride, Upjohn), with its 1.2 to 8 grams/day dosage range, covers many serious and even life-threatening infections. Lincocin is effective in infections due to susceptible strains of streptococci, pneumococci, and staphylococci. Lincocin IV therefore can be as useful in your hospitalized patients as its IM use has proved to be in your office patients. As with all antibiotics, *in vitro* susceptibility studies should be performed.

1.2 to 8 grams/day IV dosage range: Most hospitalized patients with uncomplicated pneumonias respond satisfactorily to 1.2 to 1.8 grams/day of Lincocin IV. These doses may have to be increased for more serious infections. In life-threatening situations as much as 8 grams/day has been administered intravenously to adults.

In usual IV doses, Lincocin (lincomycin hydrochloride, Upjohn) should be diluted in 250 ml or more of normal saline solution or 5% glucose in water. But when 4 grams or more per day is given, Lincocin should be diluted in not less than 500 ml of either solution, and the rate of administration should not exceed 100 ml/hour. Too rapid intravenous administration of doses exceeding 4 grams may result in hypotension or, in rare instances, cardiopulmonary arrest.

Effective gram-positive antibiotic: Lincocin IV is effective in respiratory tract, skin and soft-tissue, and bone



infections caused by susceptible strains of pneumococci, streptococci, and staphylococci, including penicillin-resistant strains. Staphylococcal strains resistant to Lincocin (lincomycin hydrochloride, Upjohn) have been recovered. Before initiating therapy, culture and susceptibility studies should be performed. Lincocin has proved valuable in treating patients hypersensitive to penicillin or cephalosporins, since Lincocin does not share antigenicity with these compounds. However, hypersensitivity reactions have been reported, some of these in patients known to be sensitive to penicillin.

Well tolerated at infusion site: Lincocin intravenous infusions have not produced local irritation or phlebitis, when given as recommended. Lincocin is usually well tolerated in patients who are hypersensitive to other drugs. Nevertheless, Lincocin should be used cautiously in patients with asthma or significant allergies.

In patients with impaired renal function, the recommended dose of Lincocin should be reduced to 25–30% of the dose for patients with normal kidney function. Its safety in pregnant patients and in infants less than one month of age has not been established.

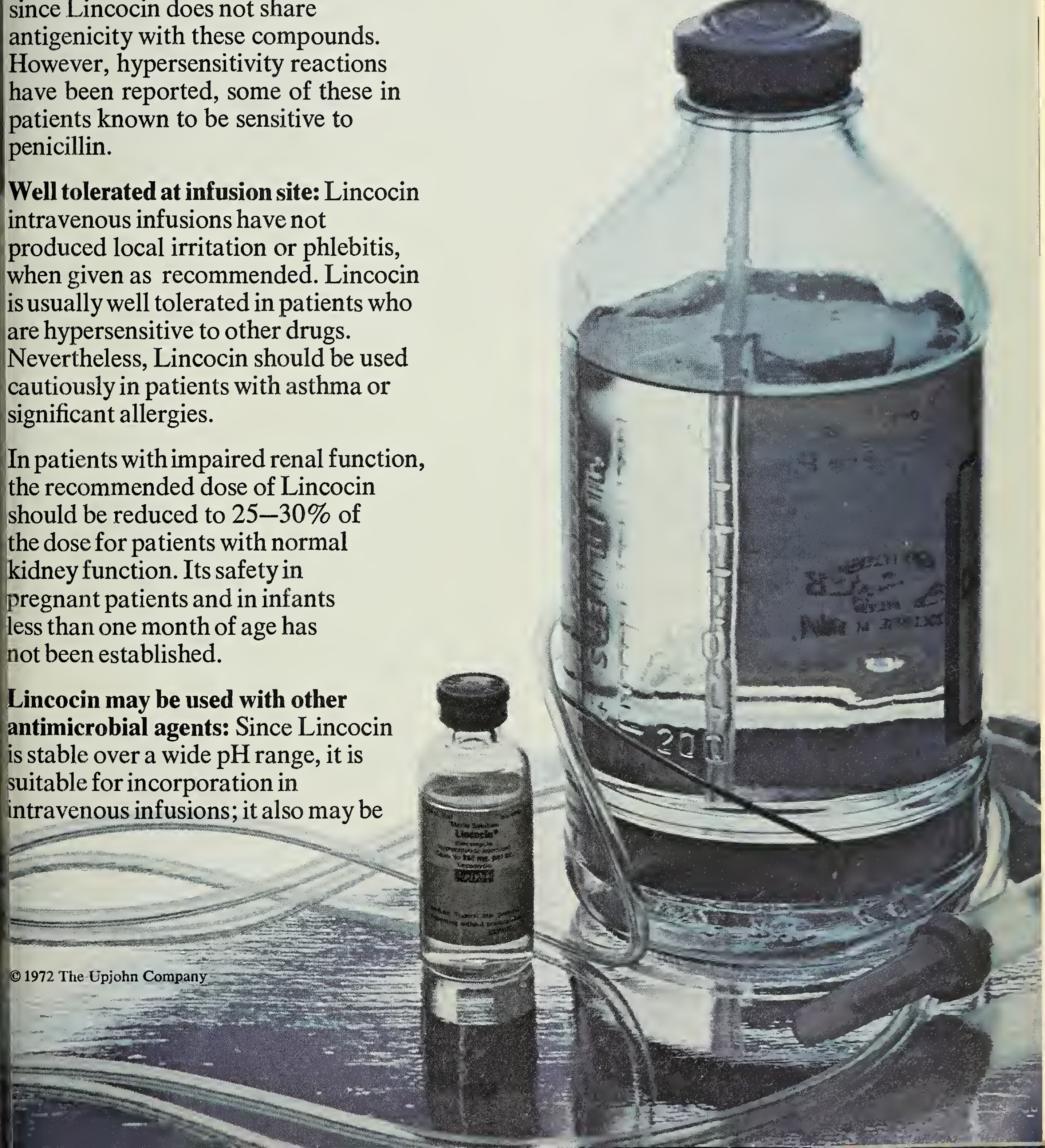
Lincocin may be used with other antimicrobial agents: Since Lincocin is stable over a wide pH range, it is suitable for incorporation in intravenous infusions; it also may be administered concomitantly with other antimicrobial agents when indicated. However, Lincocin should not be used with erythromycin, as *in vitro* antagonism has been reported.

Lincocin®

Sterile Solution (300 mg per ml)

(lincomycin hydrochloride, Upjohn)

For further prescribing information, please see following page.



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● Sterile Solution (300 mg. per ml.) ●

Lincocin®

(lincomycin hydrochloride, Upjohn)

Up to 8 grams per day by IV infusion for hospitalized patients with life-threatening infections. Lincocin is effective in infections due to susceptible strains of streptococci, pneumococci, and staphylococci. As with all antibiotics, *in vitro* susceptibility studies should be performed.

Each preparation contains:	Lincomycin hydrochloride monohydrate equivalent to lincomycin base
250 mg Pediatric Capsule	250 mg
500 mg Capsule	500 mg
*Sterile Solution per 1 ml	300 mg
Syrup per 5 ml	250 mg

*Contains also: Benzyl Alcohol 9 mg; and, Water for Injection—q.s.

Lincocin (lincomycin hydrochloride) is indicated in infections due to susceptible strains of staphylococci, pneumococci, and streptococci. *In vitro* susceptibility studies should be performed. Cross resistance has not been demonstrated with penicillin, ampicillin, cephalosporins, chloramphenicol or the tetracyclines. Some cross resistance with erythromycin has been reported. Studies indicate that Lincocin does not share antigenicity with penicillin compounds.

CONTRAINDICATIONS: History of prior hypersensitivity to lincomycin or clindamycin. Not indicated in the treatment of viral or minor bacterial infections.

WARNINGS: *CASES OF SEVERE AND PERSISTENT DIARRHEA HAVE BEEN REPORTED AND HAVE AT TIMES NECESSITATED DISCONTINUANCE OF THE DRUG. THIS DIARRHEA HAS BEEN OCCASIONALLY ASSOCIATED WITH BLOOD AND MUCUS IN THE STOOLS AND HAS AT TIMES RESULTED IN AN ACUTE COLITIS. THIS SIDE EFFECT USUALLY HAS BEEN ASSOCIATED WITH THE ORAL DOSAGE FORM BUT OCCASIONALLY HAS BEEN REPORTED FOLLOWING PARENTERAL THERAPY.* A careful inquiry should be made concerning previous sensitivities to drugs or other allergens. Safety for use in pregnancy has not been established and Lincocin (lincomycin hydrochloride) is not indicated in the newborn. Reduce dose 25 to 30% in patients with severe impairment of renal function.

PRECAUTIONS: Like any drug, Lincocin should be used with caution in patients having a history of asthma or significant allergies. Overgrowth of nonsusceptible organisms, particularly yeasts, may occur and require appropriate measures. Patients with pre-existing monilial infections requiring Lincocin therapy should be given concomitant antimonilial treatment. During prolonged Lincocin therapy, periodic liver function studies and blood counts should be performed. Not recommended (inadequate data) in patients with pre-existing liver disease unless special clinical circumstances indicate. Continue treatment of β-hemolytic streptococci infections for 10 days to diminish likelihood of rheumatic fever or glomerulonephritis.

ADVERSE REACTIONS: *Gastrointestinal*—Glossitis, stomatitis, nausea, vomiting. Persistent diarrhea, enterocolitis, and pruritus ani. *Hemopoietic*—Neutropenia, leukopenia, agranulocytosis, and thrombocytopenic purpura have been reported. *Hypersensitivity reactions*—Hypersensitivity reactions such as angioneurotic edema, serum sickness, and anaphylaxis have been reported, sometimes in patients sensitive to penicillin. If allergic reaction occurs, discontinue drug. Have epinephrine, corticosteroids, and antihistamines available for emergency treatment. *Skin and mucous membranes*—Skin rashes, urticaria, vaginitis, and rare instances of exfoliative and vesiculobullous dermatitis have been reported. *Liver*—Although no direct relationship to liver dysfunction is established, jaundice and abnormal liver function tests (particularly serum transaminase) have been observed in a few instances. *Cardiovascular*—Instances of hypotension following parenteral administration have been reported, particularly after too rapid IV administration. Rare instances of cardiopulmonary arrest have been reported after too rapid IV administration. If 4.0 grams or more administered IV, dilute in 500 ml of fluid and administer no faster than 100 ml per hour. *Special senses*—Tinnitus and vertigo have been reported occasionally. *Local reactions*—Excellent local tolerance demonstrated to intramuscularly administered Lincocin (lincomycin hydrochloride). Reports of pain following injection have been infrequent. Intravenous administration of Lincocin in 250 to 500 ml of 5% glucose in distilled water or normal saline has produced no local irritation or phlebitis.

HOW SUPPLIED: *250 mg* and *500 mg* Capsules—bottles of 24 and 100. *Sterile Solution, 300 mg per ml*—2 and 10 ml vials and 2 ml syringe. *Syrup, 250 mg per 5 ml*—60 ml and pint bottles.

For additional product information, consult the package insert or see your Upjohn representative.

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140/90 is normal blood pressure...or is it?

An extensive study based on nearly 4 million life insurance policies suggests that a blood pressure reading of 140/90 requires close medical supervision.

The Build
and
Blood Pressure
Study

Study Findings. Twelve years ago the Society of Actuaries reported on an extensive study based on the lives and deaths represented by almost 4 million life insurance policies. From this vast survey—"The Build and Blood Pressure Study"[1]—insurance experts concluded that:

- Blood pressure above 140/90 is accompanied by increased morbidity and requires close medical attention.
- Even small increments in either systolic or diastolic blood pressure progressively and steeply shorten life expectancy.

Other Studies. Studies conducted with large numbers of patients since that time have echoed the above findings. Two studies published in 1970—the VA Cooperative Study Group on "Effects of Treatment on Morbidity in Hypertension"[2] and the "Framingham Study"[3]—suggest that treatment of even mild hypertension may, over time, offer significant benefits to the patient.

Another Point of View. Although a growing body of studies suggests that treatment of mild hypertension is warranted, medical opinion is not unanimous. Some clinicians recommend that drug treatment for mild hypertension be reserved for patients with additional risk factors such as smoking, high cholesterol levels, heart or kidney involvement, or a family history of vascular disease. Dr. Walter M. Kirkendall stated this position in his recent paper "What's With Hypertension These Days?"[4] Discussing the management of hypertension in patients with a sustained diastolic pressure up to 100 mm Hg, he said: "Generally, I do not recommend antihypertensive therapy unless patient's blood pressure approaches the upper limit for the group and a number of adverse factors exist, such as male sex, family history of vascular disease, youth, evidence of heart or kidney involvement."

Drug Therapy for Hypertension. Although opinion varies on when to start drug therapy for mild hypertension, many physicians agree that treatment should start with a thiazide diuretic such as HydroDIURIL. For the adult patient, the usual starting dosage is 50 mg b.i.d. Dosage adjustments are recommended as the patient responds to treatment. The patient whose therapy begins with HydroDIURIL frequently can continue to benefit from it, because HydroDIURIL usually maintains its antihypertensive effect even when therapy is prolonged.

MSD
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25- and 50-mg tablets

HydroDIURIL®
(Hydrochlorothiazide|MSD)

Therapy to Start With

For a brief summary of prescribing information, please see next page.

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1. Society of Actuaries, *The Build and Blood Pressure Study*, 1959.
2. Veterans Administration Cooperative Study Group on Antihypertensive Agents, "Effects of Treatment on Morbidity in Hypertension," JAMA *213*:1143-1152, Aug. 17, 1970.
3. Kannel, William B., *et al.*: "Epidemiologic Assessment of the Role of Blood Pressure in Stroke—The Framingham Study," JAMA *214*:301-310, Oct. 12, 1970.
4. Kirkendall, Walter M.: "What's With Hypertension These Days?" Consultant, Jan. 1971.

25- and 50-mg tablets

HydroDIURIL®

(Hydrochlorothiazide|MSD)

Therapy to Start With

Drug Therapy for Hypertension. Although opinion varies on when to start drug therapy for mild hypertension, many physicians agree that treatment should start with a thiazide diuretic such as HydroDIURIL. For the adult patient, the usual starting dosage is 50 mg b.i.d. Dosage adjustments are recommended as the patient responds to treatment. The patient whose therapy begins with HydroDIURIL frequently can continue to benefit from it, because HydroDIURIL usually maintains its antihypertensive effect even when therapy is prolonged.

CONTRAINDICATIONS: Anuria; increasing azotemia and oliguria during treatment of severe progressive renal disease. Known sensitivity to this compound. Nursing mothers; if use of drug is deemed essential, patient should stop nursing.

WARNINGS: May precipitate or increase azotemia. Use special caution in impaired renal function to avoid cumulative or toxic effects. Minor alterations of fluid and electrolyte balance may precipitate coma in hepatic cirrhosis.

When used with other antihypertensive drugs, careful observation for changes in blood pressure must be made, especially during initial therapy. Dosage of other antihypertensive agents, especially ganglion blockers, must be reduced by at least 50% because HydroDIURIL potentiates their action.

Stenosis and ulceration of the small bowel causing obstruction, hemorrhage, and perforation have been reported with the use of enteric-coated potassium tablets, either alone or with nonenteric-coated thiazides. Surgery was frequently required, and deaths have occurred. Such formulations should be used only when indicated and when dietary supplementation is impractical. Discontinue immediately if abdominal pain, distention, nausea, vomiting, or gastrointestinal bleeding occurs.

Thiazides cross placenta and appear in cord blood. In women of childbearing age, potential benefits must be weighed against possible hazards to fetus, such as fetal or neonatal jaundice, thrombocytopenia, and possibly other adverse reactions which have occurred in the adult.

The possibility of sensitivity reactions should be considered in patients with a history of allergy or bronchial asthma. The possibility of exacerbation or activation of systemic lupus erythematosus has been reported for sulfonamide derivatives, including thiazides.

PRECAUTIONS: Check for signs of fluid and electrolyte imbalance, particularly if vomiting is excessive or patient is receiving parenteral fluids. Warning signs, irrespective of cause, are dryness of mouth, thirst, weakness, lethargy, drowsiness, restlessness, muscle pains or cramps, muscular fatigue, hypotension, oliguria, tachycardia, and gastrointestinal disturbances. Hypokalemia may develop (especially with brisk diuresis) in severe cirrhosis; with concomitant steroid or ACTH therapy; or with inadequate electrolyte intake. Digitalis therapy may exaggerate metabolic effects of hypokalemia, especially with reference to myocardial activity. Hypokalemia may be avoided or treated by use of potassium chloride or giving foods with a high potassium content. Similarly, any chloride deficit may be corrected by use of ammonium chloride (except in patients with hepatic disease) and largely prevented by a near normal salt intake. Hypochloremic alkalosis occurs infrequently and is rarely severe. In severely edematous patients with congestive failure or renal disease, a low salt syndrome may occur if dietary salt is unduly restricted, especially during hot weather.

Thiazides may increase responsiveness to tubocurarine. The antihypertensive effect of the drug may be enhanced in the postsympathectomy patient. Arterial responsiveness to norepinephrine is decreased, necessitating care in surgical patients. Discontinue drug 48 hours before elective surgery. Orthostatic hypotension may occur and may be potentiated by alcohol, barbiturates, or narcotics.

Pathological changes in the parathyroid glands with hypercalcemia and hypophosphatemia have been seen in a few patients on prolonged thiazide therapy. The effect of discontinuing thiazide therapy on serum calcium and phosphorus levels may be helpful in assessing the need for parathyroid surgery in such patients. Parathyroidectomy has elicited subjective clinical improvement in most patients, but has no effect on hypertension. Thiazide therapy may be resumed after surgery.

Use cautiously in hyperuricemic or gouty patients; gout may be precipitated. May affect insulin requirements in diabetics; may induce hyperglycemia and glycosuria in latent diabetics.

ADVERSE REACTIONS: Rare reactions include thrombocytopenia, leukopenia, agranulocytosis, aplastic anemia, cholestasis, and pericholangiolitic hepatitis. Nausea, vomiting, diarrhea, dizziness, vertigo, paresthesias, transient blurred vision, sialadenitis, purpura, rash, urticaria, photosensitivity, or other hypersensitivity reactions may occur. Cutaneous vasculitis precipitated by thiazide diuretics has been reported in elderly patients on repeated and continuing exposure to several drugs. Scattered reports have linked thiazides to pancreatitis, xanthopsia, neonatal thrombocytopenia, and neonatal jaundice. When adverse reactions are moderate or severe, the dosage of thiazides should be reduced or therapy withdrawn.

For more detailed information, consult your MSD Representative or see the Direction Circular. Merck Sharp & Dohme, Division of Merck & Co., Inc., West Point, Pa. 19486

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Try Eutron™ on a stubborn diastolic

pargyline hydrochloride 25 mg. and methyclothiazide 5 mg.

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Filmtab®
EUTRON
Pargyline
Hydrochloride
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Caution: Federal (U
law prohibits dispensing
without prescription.
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When you're not satisfied with your patient's diastolic "end point" under present treatment, consider a trial of Eutron. It will often bring further reduction of blood pressure, even in severe diastolic hypertension.

Special Characteristics of Eutron:

Course of therapy usually is smooth, with blood pressure reducing gradually over one to three weeks.

Around-the-clock effect from a single daily dose.

Provides diuresis when edema accompanies hypertension.

Free of central depressant action.

Lower doses of pargyline hydrochloride are made possible because of the methyclothiazide component.

Special Restrictions (see back of page):

Tyramine-containing foods (e.g. aged cheese) should be avoided. (For further listing of foods, see back of page.)

If alcohol is used, it should be used cautiously and in reduced amounts.

Patients should be warned against the concurrent use of non-prescription medications (particularly cold preparations and antihistamines), or prescription drugs without physician's consent.

Discontinue Eutron at least two weeks prior to elective surgery.

Before prescribing Eutron, see prescribing information in package insert. A brief summary appears on next page.

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Brief Summary
EUTRON™

pargyline hydrochloride and methyclothiazide

Filmtab®

INDICATIONS. EUTRON (pargyline hydrochloride and methyclothiazide) is indicated in the treatment of patients with moderate to severe hypertension, especially those with severe diastolic hypertension. *It is not recommended for use in patients with mild or labile hypertension amenable to therapy with sedatives and/or thiazide diuretics alone.*

Because of the potent diuretic properties of methyclothiazide, the combination is particularly suited for use when congestive heart failure or other conditions requiring diuretic therapy coexist with hypertension, or when edema attributable to antihypertensive therapy develops.

As discussed in regard to dosage and administration, it is desirable to establish the dosage requirements for EUTRON by the administration of Eutonyl and Enduron separately.

CONTRAINDICATIONS. 1. Pargyline therapy is contraindicated in patients with pheochromocytoma, paranoid schizophrenia, hyperthyroidism and advanced renal failure.

2. Pargyline should not be administered to those with malignant hypertension, or to children under twelve years of age because significant clinical information concerning the use of the drug in these conditions is not available.

3. In general, the following drugs or agents are contraindicated in patients receiving pargyline hydrochloride:

a. Centrally acting sympathomimetic amines such as amphetamine and its derivatives (also found in anorectic preparations).
   Peripherally acting sympathomimetic drugs such as ephedrine and its derivatives (also found in nasal decongestants, hay fever preparations and cold remedies).

b. Aged and natural cheese (e.g., Cheddar, Camembert, and Stilton), and other foods (e.g., pickled herring, Chianti wine, pods of broad beans, chicken livers, chocolate and yeast products), which require the action of bacteria or molds for their preparation or preservation, because of the presence of pressor substances such as tyramine. Banana peels are also contraindicated. Cream cheese, processed cheese, and cottage cheese can be allowed in the diet during EUTRON therapy, since their tyramine content is inconsequential.
   In some patients receiving EUTRON, tyramine may precipitate an abrupt rise in blood pressure accompanied by some or all of the following: severe headache, chest pain, profuse sweating, palpitation, tachycardia or bradycardia, visual disturbances, stertorous breathing, coma, and intracranial bleeding (which could be fatal). A phenothiazine derivative or phentolamine may be administered parenterally for treatment of such an acute hypertensive reaction.

c. Parenteral administration of reserpine or guanethidine may cause hypertensive reactions from sudden release of catecholamines. Parenteral use of these drugs is contraindicated during, and for at least one week following, treatment with EUTRON.

d. Imipramine, amitriptyline, desipramine, nortriptyline, or their analogues should not be used with pargyline. The use of these drugs with monoamine oxidase inhibitors has been reported to cause vascular collapse and hyperthermia which may be fatal. A drug-free interval (about two weeks) should separate therapy with EUTRON and use of these agents.

e. Methyldopa or dopamine, which may cause hyperexcitability in patients receiving pargyline, should not be given.

f. Other monoamine oxidase inhibitors should not be added to a EUTRON regimen since they may augment the effects of pargyline.

4. Methyclothiazide is contraindicated in patients with a known sensitivity to methyclothiazide and/or other thiazide diuretics. It should not be used in patients with severe renal disease (except nephrosis) or complete renal shutdown. Thiazide diuretics should not be used in the presence of severe liver disease and/or impending hepatic coma. Hepatic coma has been reported as a consequence of hypokalemia in patients receiving thiazide diuretics.

WARNINGS

A PATIENTS

1. PATIENTS SHOULD BE WARNED AGAINST THE USE OF ANY OVER-THE-COUNTER PREPARATIONS, PARTICULARLY "COLD PREPARATIONS" AND ANTIHISTAMINES OR PRESCRIPTION DRUGS WITHOUT THE KNOWLEDGE AND CONSENT OF THE PHYSICIAN.
2. PATIENTS SHOULD BE CAUTIONED ON THE USE OF CHEESE (SEE CONTRAINDICATIONS) AND ALCOHOLIC BEVERAGES IN ANY FORM.
3. PATIENTS SHOULD BE WARNED ABOUT THE LIKELIHOOD OF THE OCCURRENCE OF ORTHOSTATIC HYPOTENSION.
4. PATIENTS SHOULD BE INSTRUCTED TO REPORT PROMPTLY THE OCCURRENCE OF SEVERE HEADACHE OR OTHER UNUSUAL SYMPTOMS.
5. PATIENTS WITH ANGINA PECTORIS OR CORONARY ARTERY DISEASE SHOULD BE ESPECIALLY WARNED NOT TO INCREASE THEIR PHYSICAL ACTIVITIES IN RESPONSE TO A DIMINUTION IN ANGINAL SYMPTOMS OR AN INCREASE IN WELL-BEING OCCURRING DURING TREATMENT WITH EUTRON.

B. PHYSICIANS

1. WHEN INDICATED THE FOLLOWING SHOULD BE CAUTIOUSLY PRESCRIBED IN REDUCED DOSAGES:
   a. ANTIHISTAMINES
   b. HYPNOTICS, SEDATIVES OR TRANQUILIZERS
   c. NARCOTICS (MEPERIDINE SHOULD NOT BE USED)
2. DISCONTINUE EUTRON AT LEAST TWO WEEKS PRIOR TO ELECTIVE SURGERY.
3. IN EMERGENCY SURGERY THE DOSE OF NARCOTICS OR OTHER PREMEDICATIONS SHOULD BE REDUCED TO 1/4 TO 1/5 THE USUAL AMOUNT. CLINICAL EXPERIENCE HAS SHOWN THAT RESPONSE TO ALL ANESTHETIC AGENTS CAN BE EXAGGERATED IN PATIENTS RECEIVING EUTRON. THEREFORE THE DOSE OF THE ANESTHETIC SHOULD BE CAREFULLY ADJUSTED.
4. PARGYLINE HYDROCHLORIDE MAY INDUCE HYPOGLYCEMIA.
5. CARE SHOULD BE EXERCISED IN USING EUTRON IN PATIENTS WITH ADVANCED RENAL FAILURE.

The possibility of sensitivity reactions to methyclothiazide or pargyline should be considered in patients with a history of allergy or bronchial asthma

There have been several reports published and unpublished, concerning nonspecific small bowel lesions consisting of stenosis with or without ulceration, associated with the administration of enteric-coated thiazides with potassium salts. These lesions may occur with enteric-coated potassium tablets alone or when they are used with nonenteric-coated thiazides, or certain other oral diuretics.

These small bowel lesions have caused obstruction, hemorrhage and perforation. Surgery was frequently required and deaths have occurred.

Available information tends to implicate enteric-coated potassium salts although lesions of this type also occur spontaneously. Therefore, coated potassium-containing formulations should be administered only when adequate dietary supplementation is not practical, and should be discontinued immediately if abdominal pain, distention, nausea, vomiting or gastrointestinal bleeding occurs.

The possibility of exacerbation or activation of systemic lupus erythematosus has been reported for sulfonamide derivatives, including thiazides.

EUTRON does not contain added potassium.

USE IN PREGNANCY

Pargyline Hydrochloride. Safe use of pargyline during pregnancy or lactation has not yet been established. Before prescribing pargyline in pregnancy, in lactation, or in women of childbearing age, the potential benefits of the drug should be weighed against its possible hazard to mother and child.

Methyclothiazide. Thiazides should be used with caution in pregnant women and nursing mothers since they cross the placental barrier and appear in cord blood and in breast milk. The use of thiazides may result in fetal or neonatal jaundice, bone marrow depression and thrombocytopenia, altered carbohydrate metabolism in newborn infants of mothers showing decreased glucose tolerance, and possible other adverse reactions which have occurred in the adult. When the drug is used in women of childbearing age, the potential benefits of the drug should be weighed against the possible hazards to the fetus.

PRECAUTIONS

Pargyline Hydrochloride. The therapeutic response to a variety of drugs may be changed, or exaggerated, in patients receiving a monoamine oxidase inhibitor such as pargyline hydrochloride. Caffeine, alcohol, antihistamines, barbiturates, chloral hydrate, and other hypnotics, sedatives, tranquilizers and narcotics (meperidine should not be used), should be used cautiously and at reduced dosage in patients who are taking pargyline.

Pargyline has not been shown to damage the kidney or liver. However, laboratory studies including complete blood counts, urinalyses, and liver function tests should be performed periodically. The drug should be used with caution in the presence of liver disease. All patients with impaired circulation to vital organs from any cause including those with angina pectoris, coronary artery disease, and cerebral arteriosclerosis should be closely observed for symptoms of orthostatic hypotension. If hypotension develops in these patients, EUTRON dosage should be reduced or therapy discontinued since severe and/or prolonged hypotension may precipitate cerebral or coronary vessel thromboses.

The hypotensive effect of pargyline may be augmented by febrile illnesses. It may be advisable to withdraw the drug during such diseases.

Since pargyline is excreted primarily in the urine, patients with impaired renal function may experience cumulative drug effects. Such patients should also be watched for elevations of blood urea nitrogen and other evidence of progressive renal failure. If such alterations should persist and progress, the drug should be discontinued.

An increased response to central depressants may be manifested by acute hypotension and increased sedative effect. Pargyline also may augment the hypotensive effects of anesthetic agents and surgery. For this reason, the drug should be discontinued from at least two weeks prior to surgery.

In the event of emergency surgery smaller than usual doses (1/4 to 1/5) of narcotics, analgesics, sedatives, and other premedications should be used. If severe hypotension should occur, this can be controlled by small doses of a vasopressor agent such as levarterenol.

Pargyline therapy should not be used in individuals with hyperactive or hyperexcitable personalities, as some of these patients show an undesirable increase in motor activity with restlessness, confusion, agitation and disorientation. Clinical studies have shown that pargyline may unmask severe psychotic symptoms such as hallucinations or paranoid delusions in some patients with pre-existing serious emotional problems. This can usually be controlled by judicious administration of chlorpromazine intramuscularly, or other phenothiazines, the patient remaining supine for one hour after administration.

Pargyline should be used with caution in patients with Parkinsonism, as it may increase symptoms. In addition, great care is required if pargyline is administered in conjunction with anti-parkinsonian agents.

In experience to date, pargyline has not been associated with eye changes or optic atrophy as reported with the use of some hydrazine monoamine oxidase inhibitors. However, patients receiving this drug for prolonged periods should be examined for any changes in color perception, visual fields, fundi, and visual acuity.

Clinical reports state that certain individuals receiving pargyline for a prolonged period of time are refractory to the nerve-blocking effects of local anesthetics, e.g., lidocaine.

Methyclothiazide. Thiazide therapy should be used with caution in patients with severely impaired renal function because of the possibility of cumulative effects. Caution is also necessary in patients with severely impaired hepatic function or progressive liver disease.

Thiazide drugs may reduce response to levarterenol. Accordingly, the dosage of vasopressor agents may need to be modified in surgical patients who have been receiving thiazide therapy.

Thiazide drugs may increase the responsiveness to tubocurarine

The antihypertensive effect of the drug may be enhanced in the sympathectomized patient.

All patients should be observed for clinical signs of fluid or electrolyte imbalance, including hyponatremia ("low-salt" syndrome). These include thirst, dryness of the mouth, lethargy and drowsiness.

Hypokalemia may occur during therapy with methyclothiazide. In such cases supplemental potassium may be indicated. Potassium depletion can be hazardous in patients taking digitalis. Myocardial sensitivity to digitalis is increased in the presence of reduced serum potassium and signs of digitalis intoxication may be produced by formerly tolerated doses of digitalis. Hypochloremic alkalosis may occur following intensive or prolonged thiazide therapy. Replacement of chloride may be indicated in such cases.

Thiazides may decrease serum P.B.I. levels without signs of thyroid disturbance.

ADVERSE REACTIONS. Generally side effects should not be severe or serious when the recommended dosages are used, and necessary precautions are observed. If side effects are severe or persist in spite of symptomatic treatment, the dosage should be reduced or the drug withdrawn. See also Warnings and Precautions.

Pargyline Hydrochloride. The most frequently occurring side effects are those associated with orthostatic hypotension (dizziness, weakness, palpitation, or fainting). These usually respond to a reduction of dosage. Patients should be warned against rising to a standing position too quickly, especially when getting out of bed. Severe and persistent orthostatic hypotension should be avoided by reduction in dosage and/or discontinuation of therapy.

Mild constipation, fluid retention with or without edema, dry mouth, sweating, increased appetite, arthralgia, nausea and vomiting, headache, insomnia, difficulty in micturition nightmares, impotence and delayed ejaculation, rash and purpura, have also been encountered. Hyperexcitability, increased neuromuscular activity (muscle twitching) and other extra-pyramidal symptoms have been reported. Gain in weight may be due either to edema or increased appetite. Drug fever is extremely rare. In some patients reduction of blood sugar has been noted. Although the significance of this has not been elucidated, the possibility of hypoglycemic effects should be borne in mind. Congestive heart failure has been reported in patients with reduced cardiac reserve.

Methyclothiazide. Side effects that may accompany thiazide therapy include anorexia, nausea, vomiting, diarrhea, headache, dizziness, paresthesias, weakness, skin rash, photosensitivity. Jaundice and pancreatitis also have been reported.

Blood dyscrasias, including thrombocytopenia with purpura, agranulocytosis and aplastic anemia, have been reported with thiazide drugs.

Thiazides have been reported, on rare occasions, to have elevated serum calcium to hypercalcemic levels. The serum calcium levels have returned to normal when the medication has been stopped. This phenomenon may be related to the ability of the thiazide diuretics to lower the amount of calcium excreted in the urine.

Elevations of blood urea nitrogen, serum uric acid, and blood sugar have occurred with the use of thiazide drugs. Symptomatic gout may be induced.

Although not established as an adverse effect of methyclothiazide, it has been reported that thiazide diuretics may produce a cutaneous vasculitis in elderly patients.

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Highlights of April 26, 1972 meeting — The MSMS Council

The MSMS Council on April 26

. . . APPROVED THE APPOINTMENT by Council Chairman Masters of an ad hoc membership committee to develop guidelines for further efforts at recruitment and retention of members.

. . . AGREED TO WRITE Michigan Association of Regional Medical Programs and express The Council's opposition to further inroads by RMP into the practice of medicine.

. . . VOTED TO CREATE an ad hoc task force to work with AMA on educational project re national health insurance.

. . . APPROVED GUIDELINES and procedures for MSMS consideration of requests for endorsement of National Health Service Corps applications.

. . . APPROVED A STATEMENT "that any system of national health insurance should provide the coverage for mental and emotional disorders to the same degree and extent as for any other illness." This action was taken in response to a letter from the Michigan Psychiatric Association asking for a MSMS expression.

. . . AUTHORIZED A LETTER to the Michigan Department of Health offering suggestions for consideration in its development of proposed "Guidelines for Development of Health Care Delivery Organizations." The Health Department has been ordered by legislation to develop such guidelines.

. . . TOOK THE FOLLOWING positions on several Michigan bills, as recommended by the MSMS Committee on Legal Affairs:

—SUPPORT HB 5886—to "decriminalize" habitual drunkenness and provide treatment and rehabilitation.

—SUPPORT HB 5084 and oppose HB 6106—to provide birth control services to minors without parental consent (to implement this position taken by MSMS House of Delegates this spring) but to involve parents in general health problems of minors.

—OPPOSE HB 5882—to create a State Department of Human Resources which would envelop current Departments of Social Services, Mental Health and Public Health and certain other commissions.

. . . APPROVED A MSMS POSITION on who could dispense medications under certain circumstances, reading: "The State of Michigan Board of Pharmacy provisions be amended to allow registered nurses, on written policies and procedures adopted by the hospital pharmacy and/or therapeutics committee, to dispense medications ordered by a qualified physician in the absence of a registered pharmacist."

. . . APPROVED A NEW service to offer auto leasing to MSMS members at considerable savings.

. . . VOTED TO SEND MSMS *Medigram* to Michigan medical and osteopathic students in another effort to tell future doctors about efforts and concerns of MSMS.

. . . VOTED TO REQUEST the MSMS professional Insurance Plans Committee to explore the possibilities for improving the scope of benefits to the medical assistants so they are equal to those benefits in the MSMS group policy for physicians. The Executive Committee was instructed to act on the recommendations of the committee before June 1.

. . . AUTHORIZED AN INCREASE in the advertising rates for *Michigan Medicine* to offset increases in the costs of printing the MSMS journal.

And on April 26, The Council heard reports

. . . by MSMS President Sidney Adler, MD, on recent AMA Conference on Socio-Economics at Fort Lauderdale;

. . . by MSMS President-Elect John J. Coury, MD, and MDPAC Chairman Louis Zako, MD, on their talks at the Legislative Workshop sponsored by the state Woman's Auxiliary;

. . . by MSMS Speaker Vernon V. Bass, MD, who reviewed the spring House of Delegates meeting and outlined preliminary plans for the fall meeting, October 1-3 in Detroit, and

. . . by Chairman of the MSMS Delegation to the AMA, Donald N. Sweeny, MD, who invited The MSMS Council to present constructive, written criticism to the AMA in connection with AMA hearing.

Michigan mediscene

JUNE 6-8—Fourth Annual Spring Meeting, Michigan Chapter, American Academy of Pediatrics, Otsego Ski Club, Gaylord, contact: Nathan S. Firestone, MD, program chairman, 4791 Haddington Drive, Bloomfield Hills, 48013

JUNE 7—The Council, MSMS Headquarters, contact: Warren F. Tryloff, director

JUNE 12-16—Eighth Annual Northern Michigan Summer Program, "Diagnosis and Treatment of Some Common Medical Problems," sponsored by Department of Postgraduate Medical Education, University of Michigan, at Shanty Creek Lodge, Bellaire, contact: Neal A. Vanselow, MD, acting chairman, U-M Department of PG Medicine, Towsley Center, Ann Arbor, 48104

JUNE 18-22—Many Michigan physicians will attend AMA Annual Convention in San Francisco.

JUNE 23-24—Annual Meeting, Upper Peninsula Medical Society, Holiday Inn, Marquette, contact: Thomas B. Bolitho, MD, UPMS president, 1414 W. Fair Ave., Marquette, 49855

JUNE 25—Board meeting, Michigan chapter, American Association of Medical Assistants, noon, MSMS Headquarters, contact: Margaret Broadwell, 406 Professional Plaza, 3800 Woodward Ave., Detroit, 48201

JUNE 26—Statewide meeting to develop plan for prevention, detection and treatment of kidney disease, sponsored by Office of Comprehensive Health Planning, at MSMS Headquarters, contact: Ilze Koch, health planning consultant, State Office of Comprehensive Health Planning, Lewis Cass Building, Lansing, 48913

JUNE 26-29—International Symposium on Clinical Aspects of Metabolic Bone Disease, Henry Ford Hospital, contact: Boy Frame, MD, Henry Ford Hospital, Detroit, 48202

JUNE 26-30—American College of Physicians, Conference on Medical Interviewing, Kellogg Center, MSU, contact: Allen Enelow, MD, chairman, Department of Psychiatry, MSU, East Lansing, 48823

JULY 15-16—"Summer of 72" seminar weekend for State of Michigan Medical Assistants, Schuss Mountain, Mancelona, contact: Mrs. Audrie Chute, chairman, 3600 W. 13 Mile Road, Royal Oak, 48072

JULY 15-19—26th Annual Postgraduate Scientific Assembly of Michigan Academy of Family Physicians, Boyne Highlands, Harbor Springs, contact: George Hoekstra, MD, chairman, 100 Maple St., Parchment, 49004

JULY 27-28—Coller-Penberthy-Thirlby Conference, Park Place Motor Inn, Traverse City, contact: L. P. Skendzel, MD, Traverse City, chairman

AUG. 4-5—Annual Midsummer meeting, MSMS Council, Boyne Highlands, contact: Warren F. Tryloff, MSMS director

AUG. 25-26—Physician-Education Program, Michigan Heart Association Stroke Council, Schuss Mountain, Mancelona, contact: Harold Arnow, Director of Public Relations, MHA, 16310 W. Twelve Mile Road, P.O. Box LV-160, Southfield, 48076

SEPT. 14—Second Annual Research Forum, Michigan Heart Association, at Michigan State University, contact: Harold Arnow, Director of Public Relations, Michigan Heart Association, 16310 W. Twelve Mile Road, P.O. Box LV-160, Southfield, 48076

SEPT. 16-17—Leadership Training Seminar, State of Michigan Medical Assistants, Hospitality Inn, Lansing, contact: Dorothy Brandis, 401 W. Greenlawn, Lansing, 48910

SEPT. 21-24—Michigan Regional Meeting, American College of Physicians and Michigan Society of Internal Medicine, Otsego Ski Club, Gaylord, contact: Muir Clapper, MD, ACP governor for Michigan, Wayne State University School of Medicine, 540 E. Canfield, Detroit, 48201

OCT. 1 AND 4—The Council, Sheraton-Cadillac Hotel, Detroit, contact: Warren F. Tryloff, MSMS director

OCT. 1-5—107th Annual Session of the Michigan State Medical Society, Sheraton-Cadillac Hotel, Detroit, contact: Helen Schulte, MSMS Headquarters, for scientific information; Richard Campau, MSMS Headquarters for House of Delegates information

OCT. 5—Annual Meeting, Michigan Division, American Cancer Society, Olds Plaza Hotel, Lansing, contact: Arthur L. Crampton, executive vice president, 1205 E. Saginaw St., Lansing, 48906

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MSMS in action

Medical Education Foundation elects, makes grants

The Michigan Foundation for Medical Education has re-elected its entire slate of officers to serve during the coming year and made its annual grants to the following organizations in the indicated amounts below.

Continuing to serve the foundation are Harry A. Towsley, MD, Ann Arbor, president; Warren F. Tryloff, East Lansing, secretary, and Herbert A. Gardner, MD, treasurer. Trustees for three-year terms are Daniel Cowan, MD, East Lansing, Robert J. Mason, MD, Birmingham, and G. Thomas McKean, MD, Detroit.

BRUCE FUND—	
Central Hospital Council of Saginaw	$ 150.00
University of Michigan	3,342.12
CENTRAL FUND—	
Michigan Health Council	1,800.00
University of Michigan	2,400.00
Wayne State University	2,000.00
Michigan State University	1,400.00
TOTAL	$11,092.12

MSMS delegation supports Doctor Sweeny in AMA Council bid

The Michigan delegation to the American Medical Association is firming resolutions and other plans-of-action with the approach of the June 18-22 dates of the AMA annual convention in Chicago.

The 16 delegates and alternates from Michigan are supporting the candidacy of Donald N. Sweeny, Jr., MD, Detroit, chairman of the Michigan delegation, for a seat on the AMA Council on Medical Services.

Doctor Sweeny was nominated by the AMA Board of Trustees at its May 9 meeting to fill the vacancy left when George W. Slagle, MD, Battle Creek, steps down at the convention. Doctor Slagle has held the post for three terms, the maximum allowed.

The Michigan delegation plans to submit to the AMA a resolution that the AMA House "commend the representatives of the AMA for their efforts and urge that they continue and intensify their efforts to resolve problems of adverse regulatory decisions concerning Title XVIII and XIX."

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MSMS evaluating its PR program in light of Phase II recommendations

By Thomas R. Berglund, MD, Chairman
MSMS Committee on Public Relations

The MSMS Committee on Public Relations is busy evaluating the comments made by MSMS members about communications in the Alexander Grant and Company Phase II Survey.

The entire Phase II Report, which was sent to MSMS delegates before the Spring meeting of the House, has been referred to the MSMS Planning and Priorities Committee for recommendations to The Council and for consideration at the fall session of the House. Appropriate committees also will study the Report.

As a delegate, as secretary of the Kalamazoo Academy of Medicine, and as chairman of the MSMS Committee on Public Relations, I am keenly interested in the opinions voiced by the members. I have discussed several times various aspects of the survey report with Herbert A. Auer, manager of our MSMS Department of Communications and Professional Information.

The Phase II Study, MSMS members will recall, was authorized by the House to survey the opinions of the members and to develop alternative forms of organization that would be more responsive to the needs of the members.

There were 7,913 questionnaires sent out and 2,227 responses. The 28 per cent response has been regarded as good and valid. The highest percentage response was 38 per cent from Jackson County, and the lowest of 21 percent was from Wayne County members.

THE SURVEY FOUND that the "most valued services and functions" are in this order:

Michigan Medicine
Professional and Ethical Standards
Public Relations
Professional Association work

Those seen as "less valuable" were Government Relations, Group Insurance Programs, Medical Economics, Annual Meeting, Scientific Information and Training, Legal Services.

The survey asked, "How do you value the MSMS Public Relations Work?" The responses were as follows:

Of Substantial Value	9 per cent
Moderate Value	30 per cent
Occasional Value	35 per cent
Of No Value or No Opinion	26 per cent

With this kind of grading system it is good to find that 3 of 4 doctors felt the public relations work was of occasional, some, or substantial value.

The Department of Communications also is responsible for *Michigan Medicine* which scored the highest. The replies there were:

Of Substantial Value	10 per cent
Of Moderate Value	31 per cent
Of Occasional Value	41 per cent
Of No Value or No Opinion	18 per cent

These figures can be interpreted to show that more than 8 of 10 doctors felt the journal was of occasional, some, or substantial value.

* * *

THE RESPONSES TO another survey question provide the PR Committee little definitive direction about the PR approach that the members prefer. The survey asked members what PR approach they favored. The statistics can roughly be interpreted like this:

Of 10 doctors surveyed, their first answers were as follows:

1 had no opinion or didn't answer
3 favored "aggressive methods"
3 favored "soft sell"
2 favored "long term education"
1 said "do good work"

Or it can be stated that three of 10 said "be aggressive" (which is subject to many interpretations) while six others disagreed and said "do good work, depend on long-range education, and use soft-sell methods."

Two of the survey recommendations to a large degree are related and can be considered together as we think of possible action. One recommendation says the MSMS public relations program in part "should be designed to improve the public's awareness regarding the objectives of professional medicine." This is done through MSMS projects and conferences and statements. MSMS tells the public about the concerns of doctors through news conferences, news releases, the weekly radio program, other radio and TV involvement and publications.

The other related recommendation is that the public relations program "should if possible, be designed to involve large numbers of physicians and require participation by each component unit."

Certainly MSMS leaders and staff agree that PR projects should involve as many units and doctors as possible. There are various reasons why participation, or impact, has not been as great in the past as desired.

These reasons can be cited: (1) Perhaps MSMS has not had adequate workshops for component society leaders (this is being corrected); (2) Maybe some projects have been poorly conceived; (3) MSMS and AMA projects have been announced and promoted too late without adequate time to be considered and implemented effectively.

In order to be more visible with effective public service projects and in order to increase participation by MSMS members, the PR Committee is trying to find a way to identify and develop two, three or four major public information projects for 1973.

To try this, the PR Committee held a "hearing" at its meeting May 24 as a new approach to MSMS project planning in the public relations-public information area. The various MSMS committees, the specialty societies, and the voluntary health associations were invited to present proposals for major MSMS public relations activities in 1973.

The PR Committee hopes that many good ideas will be offered and several developed in detail for 1973. Herb Auer and our committee members believe such a new approach will permit MSMS to coordinate various MSMS communications efforts in major scheduled projects and to provide helpful materials to the component societies so they will also participate.

Proposals are asked to include clearly-defined objectives and suggest ways to reach the public and/or the profession through the use of *Michigan Medicine,* MSMS conferences, or other means.

After the hearing, the PR Committee will present its recommendation for 1973 PR projects to The MSMS Council for consideration. These plans likely will be reported to the 1972 House of Delegates for information. Any resolutions there suggesting PR projects could be measured against or incorporated into the already-developed proposals.

Thomas Payne, MD, Lansing, is chairman of the task force for this PR Committee "Hearing."

* * *

MANY OF THE SUGGESTIONS that grow out of the study, as you might guess, are similar to suggestions being developed by various committees and staff members.

The Study suggests MSMS has two different needs regarding communications. MSMS should clearly define internal programs to reach the doctors and MSMS needs ways to reach the public. As you know, for the past several years, the MSMS Communications Department has consisted of Mr. Auer as manager; Judy Marr as managing editor of *Michigan Medicine,* and one secretary. In October, MSMS added Jeanne Smith, former Chicago newspaper reporter and public relations specialist. She has worked in all areas of MSMS communications for six months and was then made responsible for communications with the public under the supervision of Mr. Auer. By dividing the communications work into external with Mrs. Smith, and internal with Mr. Auer, the Public Relations Committee feels planning, operations, and evaluation should be even more effective.

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The 1972 Michigan Conference on Maternal and Perinatal Health attracted a record attendance of over 700 physicians, nurses and students to the Olds Plaza hotel, Lansing. Among the topics were amniocentesis, Rhogam, rubella, prostaglandins, genetic counseling, fetal monitoring and newborn care.

1972 Conference for Maternal Health

Conference-goers submitted many questions for further consideration by the speakers following each talk at the 1972 Michigan Conference for Maternal and Perinatal Health. Among the sponsors of the conference were Michigan pediatricians, obstetricians and gynecologists, the Ingham County Medical Society, the Michigan Bureau of Maternal and Child Health, pharmaceutical companies and MSMS.

During a break between conference sessions, small talk developed between, from left, Richard T. Mellis, MD, Kalamazoo, chairman, MSMS Committee on Maternal and Perinatal Health; Lee S. Stevenson, MD, Farmington, committee vice chairman, and Hermann Ziel, Jr., MD, of the Michigan Department of Public Health, Maternal and Child Health Bureau.

Conference chairman Joseph L. Sheets, MD, left, Lansing, conferred with speakers Mahlon S. Sharp, MD, center, Lansing obstetrician-gynecologist, and Thomas H. Kirschbaum, MD, chairman, MSU Department of OB/GYN and Reproductive Biology.

MSMS in the headlines

It is interesting to note the different headlines that appeared over the same Associated Press story about the MSMS House of Delegates action to organize a foundation for peer review.

Detroit News:
State Foundation Planned; Doctors to Review Medical Services

Iron Mountain News:
Michigan Doctors Consider 'True Peer Review' Group

Pontiac Press:
Michigan Doctors Propose Their Own Board of Review

Escanaba Daily Press:
Group to Keep Tab on Doctors' Performances

Jackson Citizen Patriot:
Doctors Eye Self-Regulation

Benton Harbor News Palladium:
Michigan Doctors Considering Professional Watchdog Group

Menominee Herald-Leader:
National Health Insurance Likely; Doctors Weigh Policing Peers

Port Huron Times Herald:
State Doctors May Form Self-Policing Board to Forestall Government Action

Flint Journal:
Michigan Doctors Consider Forming Own Review Group

Dowagiac Daily News:
State Doctors May Form New Group for Inspection

Owosso Argus Press:
Peer Review: Doctors Attempt to Head Off Federal Controls

MSMS Judicial Commission rules on use of word "clinic"

An example of the continuing work of the MSMS Judicial Commission is its recent decision that use of the word "clinic" implies more than one physician rendering service and should not be used by one physician to describe his facility, even though he may employ paramedical personnel with him.

The commission was asked its opinion by a component county medical society after one of its members had displayed a sign announcing his "eye clinic," though he was the only physician at that location.

No legal rulings were found by MSMS legal counsel governing the use of the word, but the Judicial Commission presented its view in light of the public view of its meaning.

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The touch-responsive cathode ray tube terminal is discussed by Robert M. Stow, MD, right, MSMS Computer Committee chairman, and Park W. Willis, III, MD, Ann Arbor, committee member, as they tour the East Lansing center of Biomedical Computer Systems, Inc., of Edina, Minn.

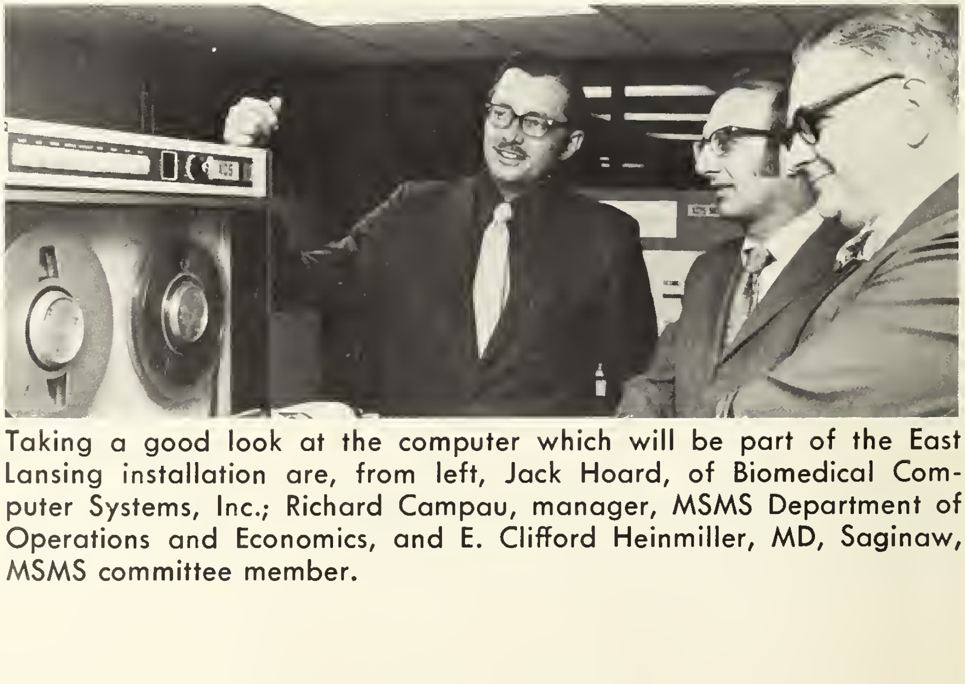
MSMS Computer Committee learning its field

The Michigan State Medical Society's new Computer Committee, formed to keep abreast of developments in the field, is in action. The four-member committee, established after passage of a resolution by the 1971 MSMS House of Delegates, held its first meeting April 19.

The committee discussed the health information system as the core of community health services. Special guest was Jerome A. Hilger, MD, president, Biomedical Computer Services, Inc., St. Paul, Minn.

Robert Stow, MD, Lansing, sponsor of the resolution passed by the House which established the committee, is chairman. On the committee are E. C. Heinmiller, MD, Saginaw; Charles G. Kramer, MD, Midland, and consultants Frank Westervelt, Wayne State University Computer Center; Al Herrell, William Beaumont Hospital, Royal Oak; N. Doyle McGlaughlin, MD, Wyandotte, and Vergil N. Slee, MD, Ann Arbor.

President of the Biomedical Computer Systems company, Jerome A. Hilger, MD, left, of Minnesota, explains fine points of the East Lansing system to N. Doyle Mc Glaughlin, MD, Wyandotte, consultant to the MSMS committee.



Taking a good look at the computer which will be part of the East Lansing installation are, from left, Jack Hoard, of Biomedical Computer Systems, Inc.; Richard Campau, manager, MSMS Department of Operations and Economics, and E. Clifford Heinmiller, MD, Saginaw, MSMS committee member.

In small doses

E. Marshall Goldberg, MD, Flint,
who has been interviewed by *Michigan Medicine* several times about his program to boost Fayette, Miss., medical staffs with Flint and Grand Rapids physicians, is now the author of a novel. The novel, "The Karamanov Equations," was published in March and is being considered for a movie. The tale of international intrigue and medicine is already in its second printing.

Hilliard Jason, MD, East Lansing,
will step down from his administrative position July 1 with Michigan State University's College of Human Medicine. Doctor Jason, who is director of the Office of Medical Education Research and Development (OMERAD) and has been a key figure in the development of the new MSU medical school, will remain at MSU to devote full time to teaching and research. He plans a year's leave of absence to serve as an educational consultant to the Lister Hill Center for Biomedical Communication of the National Library of Medicine in Bethesda.

Kenneth L. Krabbenhoft, MD, Detroit,
is one of 23 members of the newly-created National Cancer Advisory Board to the President. Doctor Krabbenhoft is included because of his membership on the National Advisory Cancer Council, which is to be superseded by the board. He will continue to serve until his council appointment expires in September 1973.

Donald C. Smith, MD, Ann Arbor,
professor of maternal and child health at the University of Michigan, has been appointed special advisor on health and medical affairs to Gov. William G. Milliken. Doctor Smith is to plan and monitor health resources for the governor, as well as advise him on current and long-range policies leading to the development of a comprehensive state-wide health program for Michigan.

Tony J. Trapasso, MD, Sault Ste Marie,
is secretary-treasurer of the Canadian-American Medical-Dental Association, founded in 1960 to foster better rapport in all related MD and DDS practices. The CAMDA held its 13th annual session Feb. 24-March 3 in Vail, Colo.

Homer Weir, MD, Plymouth,
is the new superintendent of a proposed mental retardation center to be located in Southgate. He was transferred late in March by E. Gordon Yudashkin, MD, director, Michigan Department of Mental Health. Doctor Weir has been superintendent of the Plymouth State Home and Training School.

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How physicians are affected by price stabilization regulations

The following is the AMA's interpretation of the U.S. Price Commissioner's rulings on physicians' fees and a few examples of how the ruling works. Further information on the rulings may be obtained from the MSMS Bureau of Economic Information.

Physicians are covered specifically by the Price Stabilization regulations which govern "non-institutional providers of health services" such as doctors, dentists, medical laboratories, Christian Science practitioners, etc.

As a non-institutional provider of health services a physician may charge a price in excess of his base price only to reflect allowable costs on November 14, 1971, and allowable cost increases being incurred after November 14, 1971, reduced to reflect productivity gains, and only to the extent that the increased price —

- Does not result in an increase in his profit margin over that which prevailed during his base period; and
- The aggregate of price increases does not exceed 2.5 percent per year.

These rules require the physician to justify any increase in his fee for a particular service on the basis of increased costs, subject to three limitations —

1. The increase in cost in providing a particular service must be reduced by "productivity gains," if any.

   Example: Dr. X operates a medical laboratory. He incurs additional costs in the purchase of a new diagnostic machine. The additional costs, however, are entirely offset by the increased productivity of the new machine as compared to the one it replaces. The new machine, therefore, will not support an increase in charges for the services for which it is used.

2. Irrespective of increased costs of rent, wages, malpractice insurance, etc., the physician cannot increase his fees if the result will be an increase in his profit margin over that which prevailed during his base period.

   Example: Dr. Y has been in solo practice for four years. Each year his practice has grown, requiring him to devote more time to it. During the base period his profit margin was 50 percent. Even though his overhead has increased substantially, he cannot increase his fees because his profit margin has remained the same due to additional hours of work.

3. Fees may not be increased by more than 2.5 percent per year on average.

   Example (a): Dr. Z increased his fee for a particular service by 10 percent in order to recoup his increased cost in rendering this service. He is allowed to do this since the result will not be to increase his profit margin over the base period and his average fee for the year will not be increased by more than 2.5 percent. (Averages are to be calculated on the basis of percent of total revenue per procedure.)

   Example (b): Assume that Dr. Z increased his fee for the service in January, 1972, and a few months later his accountant advises him that his profit margin for 1972 will exceed that of his base period because he is seeing more patients. Even though the increase in profit margin is not due to the price increase of the particular service in question, he will have to roll back the price of the service. Likewise, a roll back would be required if it appears that the price increase of the service will result in more than a 2.5 percent overall increase in fees.

   Example (c): Dr. X derives practically all of his income from office calls for which he charges $10.00 a visit. Because his lease expired, in January, 1972, he moves his office to a new location at a very substantial increase in rent. In addition, he has had substantial increases in cost because of higher professional liability insurance premiums, wages, etc. He figures that the additional costs could be recouped by increasing fee from $10.00 to $10.50. Applying the 2.5 percent rule he could only increase fee to $10.25. Dr. X could apply for an exception.

   Example (d): Assume that Dr. X is reluctant to increase his fee to $10.25 but inquires whether he could raise his fee to $10.50 in 1973. There is nothing in the regulations which would permit him to increase his average fee by more than 2.5 percent because he did not implement an allowable increase in a prior year.

Exceptions are made

In situations where the physician believes that the application of the price rules would work a "serious hardship or gross inequity" as applied to him, he may apply to the District Director of Internal Revenue that an exception be made in his case to permit specific increases in his fees. The regulations do not state, however, what criteria will be used in processing applications for exceptions. Presumably an exception might be allowed in the instance where a physician is able to show that his fees are substantially lower than other physicians in his community—or, if none, then in nearby communities—and that as a consequence the total fees derived from his practice are grossly inequitable as compared to other physicians.

Another instance where an inequity may be recognized, possibly, is in the case where a physician acquires board certification and desires to raise his fees to those customarily charged by certified specialists in his field.

A physician applying for an exception cannot increase his fees until the exception has been approved.

A physician's overhead consists of the costs he incurs in providing services, such as increases in rent, electricity, janitor service, and the wages of his office employees. Other increases may be related only to specific services which he furnishes as in the case of laboratory supplies used for certain diagnostic tests.

Increased fees for particular services may include overhead increases and the specific cost increases applicable to furnishing those specific services. As a practical matter the physician may not want to raise his charges by penny amounts. If he follows this practice he may forego allowable increases because the fee for one service may not be increased to cover additional costs for other services.

Explanation of terms

"Allowable cost" means any cost, direct or indirect, unless disallowed by the Price Commission.

"Base period" means any two of the physician's last three fiscal years (your accounting year for tax purposes) ending before August 15, 1971. Generally, the physician may select any two of the calendar years 1968, 1969, and 1970 as his base period. In determining a base period for the purpose of computing a profit margin during a base period, a weighted average of its profits during the two years chosen shall be used.

"Base price" means the highest price permitted for the sale of any service for the period beginning August 16, 1971 and ending November 13, 1971. In general, the base price for a particular service is the highest price paid for that during the foregoing period.

"Price increase" means an increase in the unit price of a property or service or a decrease in the quality of substantially the same property or services.

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In memoriam

Doctor Hull

Leroy W. Hull, MD
Brighton

Leroy Wetmore Hull, MD, past president of the Michigan State Medical Society, died April 8 at the age of 85. He also had served as president of the Wayne County Medical Society.

Doctor Hull was a graduate of the University of Michigan Medical School and specialized in urology. He was chief of the department of urology at Grace Hospital until his retirement in 1957 and had been a staff member for nearly 50 years.

Doctor Hull was president of the WCMS in 1944-45 and before that served as its information director and a member of its medical economics commission. He was named MSMS president in 1953 and served for two years. He also served the state society as a councillor.

He was an outspoken critic of early government health programs and in 1939 called socialized medicine a "political expedient—more associated with politicians' needs for votes than the need of the poor for medical care."

At that time Doctor Hull was sharply critical of a proposed compulsory sickness insurance to be financed by a "sickness tax," and said in a speech that the system would "wax fatter and fatter at the expense of the citizen . . . until there are more clerks than doctors and more of the insurance dollar would go to administration and overhead than to helping the sick."

Doctor Hull was president of the Detroit branch, American Urological Society, in 1940-41, and was a founder of the Urological Surgical Service at Receiving Hospital.

R. Gordon Brain, MD
Flint

Flint psychiatrist for more than 40 years, R. Gordon Brain, MD, died April 9 at the age of 78. Doctor Brain was still in private practice and was an active emeritus member of Flint's Hurley Hospital staff.

A life member of the Genesee County Medical Society and MSMS, Doctor Brain had received the MSMS 50-year award in 1967. He was a past president of the Michigan Psychiatric Association and a fellow of the American Psychiatric Association.

Doctor Brain was a graduate of Wayne State University School of Medicine and was in charge of the new psychopathic ward at Hurley Hospital. He was former city psychiatrist.

John E. Clifford, MD
Grosse Pointe Woods

John Edward Clifford, MD, Detroit-area obstetrician-gynecologist since 1937, died April 22 at the age of 61. Doctor Clifford was a life resident of the Detroit area.

He was a graduate of Wayne State University School of Medicine, and was affiliated with St. John, Cottage, St. Joseph Mercy, Hutzel and Detroit General hospitals. He was former chairman of the Department of Ob-Gyn at St. John Hospital and past president of the St. Joseph Mercy Hospital staff.

Doctor Clifford was an instructor at Wayne State University School of Medicine. He was affiliated with the American College of Surgeons, the Central Association and American College of Obstetricians and Gynecologists, and was a long-time treasurer of the Michigan Society of Obstetricians and Gynecologists.

Ben Gaber, MD
Detroit

Pediatrician Ben Gaber, MD, of Detroit, died April 1 at the age of 50.

Doctor Gaber was organizer and director of the seizure clinic at Children's Hospital of Michigan and specialized in epilepsy and learning disorders. He was a graduate of the University of Indiana College of Medicine.

Doctor Gaber was born in Russia. He was a member of the American Board of Pediatrics and American Academy of Pediatrics.

Harold F. Grover, MD
Flint

Harold F. Grover, MD, Flint physician since 1928, died April 8 at the age of 75. He was a life member of the Genesee County Medical Society and MSMS.

A general practitioner, Doctor Grover was affiliated with Hurley, McLaren General and St. Joseph Hospitals in Flint. He was a graduate of the University of Indiana medical school.

Louis Jaffe, MD
Detroit

Louis Jaffe, MD, former chief of the department of medicine at Highland Park General Hospital, died April 20 at the age of 63.

Doctor Jaffe was affiliated with Harper Hospital and was an associate professor of medicine at the Wayne State University School of Medicine. He

(Continued on page 584)

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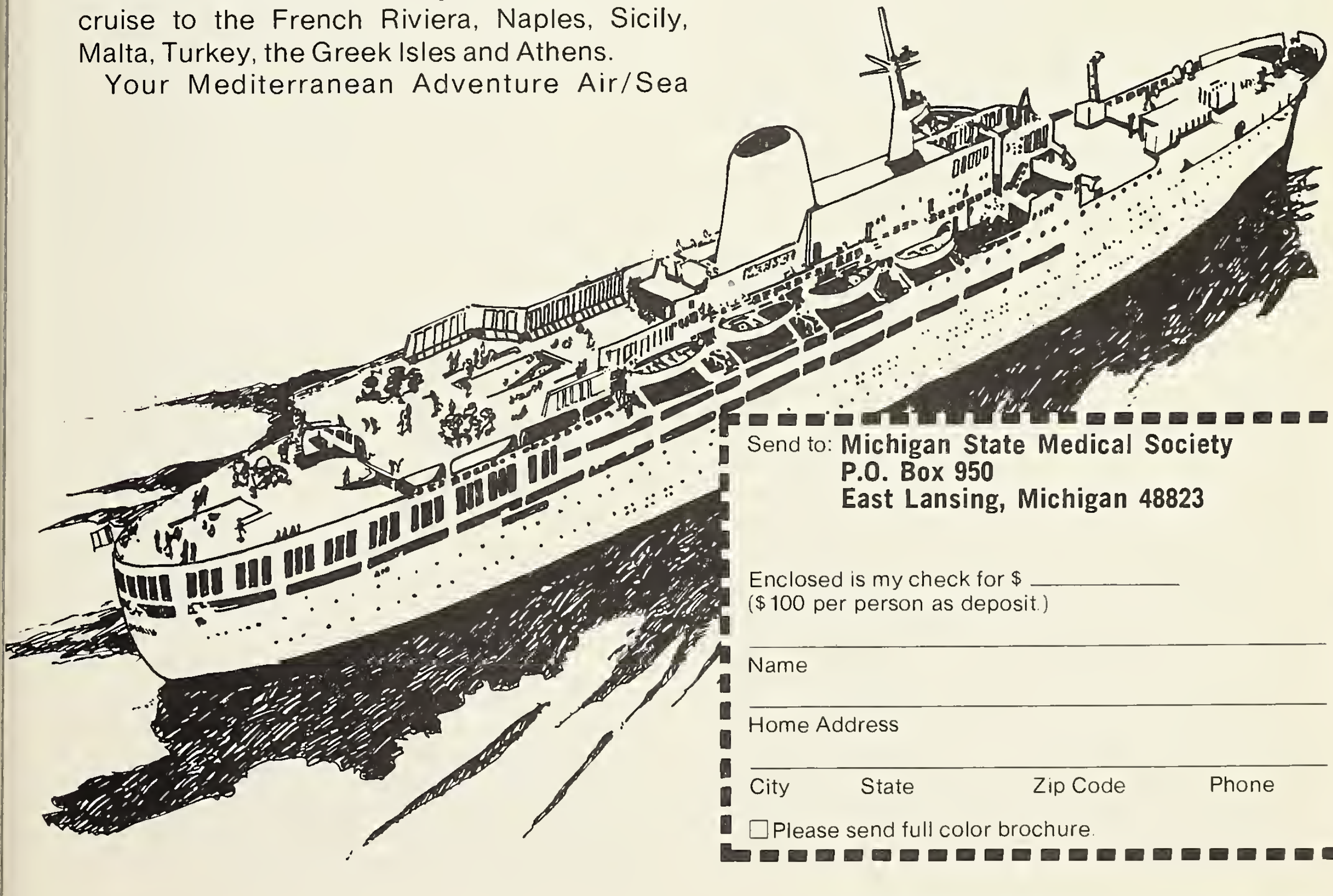

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was past president of the Detroit Medical Club and former consultant to the Allen Park VA Hospital. He was a member of the American College of Physicians and the American College of Chest Physicians, and the American Diabetic Association and the American College of Cardiology, for which he had served as Michigan governor.

A graduate of the University of Michigan Medical School, Doctor Jaffe was an internist. He practiced in Detroit his entire career.

John L. Law, MD
Seattle

John L. Law, MD, an Ann Arbor pediatrician for 34 years until his retirement in 1966, died April 5 at the age of 73. He had been living in Seattle, and was a native of Atlanta, Ga.

Doctor Law earned his medical degree at Edinburgh University in Scotland and was head of University Hospital's Department of Pediatrics in Ann Arbor in the early 1930's. He was instrumental in setting up the first postgraduate medical program at the U-M.

Doctor Law was a fellow of the Academy of International Medicine and was a fellow, life member and former board member of the American Academy of Pediatrics.

Loren E. Miller, MD
Grand Blanc

Loren Eugene Miller, MD, Flint-area physician since 1944, died April 7 at the age of 61.

Doctor Miller was a graduate of the University of Michigan Medical School and was on the staffs of Hurley, McLaren General and St. Joseph hospitals of Flint. He was a member of the American Academy of General Practice.

S. G. Murphy, MD
Detroit

Scipio Glascoe Murphy, MD, Detroit pediatrician for more than 35 years, died April 14 at the age of 71.

Doctor Murphy was one of the first pediatricians at Children's Hospital of Michigan and also was affiliated with Parkside and Burton Mercy Hospitals in Detroit. He was a graduate of Wayne State University School of Medicine.

Doctor Murphy had served as a delegate to the MSMS House of Delegates, and was a member of the Detroit Commission on Community Relations. He was a member of the Detroit Pediatric Society.

Edgar R. Sherrin, MD
Detroit

Edgar R. Sherrin, MD, former chief of staff at Mt. Carmel Mercy Hospital, died May 2 at the age of 65. Doctor Sherrin also was a past president of the Detroit Academy of Surgery.

Doctor Sherrin, a graduate of the University of Western Ontario medical school, had practiced in northwestern Detroit for over 35 years.

He was a fellow of the Detroit Academy of Surgery, the American College of Surgeons and the Royal Society of Medicine and was a member of the American Geriatrics Society.

Coller - Penberthy - Thirlby Conference July 27 - 28

A distinguished faculty including several out-of-state physicians will present the program at the 52nd annual Coller-Penberthy-Thirlby Medical Conference scheduled for July 27-28 at Traverse City.

John A. Gronvall, MD, dean of the University of Michigan Medical School and director of the University of Michigan Medical Center, will be the toastmaster for the Thursday evening dinner when Allan C. Barnes, MD, vice president, Rockefeller Foundation, will speak.

Invited guests include Robert D. Coye, MD and Andrew D. Hunt, Jr., MD, Deans, respectively, of the medical schools at Wayne State University and Michigan State University; Sidney Adler, MD, president, MSMS; Carl E. Badgley, MD, Professor Emeritus of Surgery, Section of Orthopedic Surgery, the University of Michigan Medical Center; Edgar A. Kahn, MD, Professor Emeritus of Surgery, Section of Neurosurgery, the University of Michigan Medical Center; Reed M. Nesbit, MD, Associate Director of the Joint Commission on Accreditation of Hospitals, Chicago, Illinois; Harry A. Towsley, MD, Professor Emeritus of Pediatrics and Communicable Diseases, the University of Michigan Medical Center and Mrs. Frederick A. Coller.

An estimated 350 physicians are expected.

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Though Talwin® can be compared to codeine in analgesic efficacy, it is not a narcotic. So patients receiving Talwin for prolonged periods face fewer of the consequences you've come to expect with narcotic analgesics. And that, in the long run, can mean a better outlook for your chronic-pain patient.

Talwin Tablets are:

- **Comparable to codeine in analgesic efficacy:** one 50 mg. Talwin Tablet appears equivalent in analgesic effect to 60 mg. (1 gr.) of codeine. Onset of significant analgesia usually occurs within 15 to 30 minutes. Analgesia is usually maintained for 3 hours or longer.
- **Tolerance not a problem:** tolerance to the analgesic effect of Talwin Tablets has not been reported, and no significant changes in clinical laboratory parameters attributable to the drug have been reported.
- **Dependence rarely a problem:** during three years of wide clinical use, only a few cases of dependence have been reported. In prescribing Talwin for chronic use, the physician should take precautions to avoid increases in dose by the patient and to prevent the use of the drug in anticipation of pain rather than for the relief of pain.
- **Not subject to narcotic controls:** convenient to prescribe—day or night—even by phone.
- **Generally well tolerated by most patients:** infrequently cause decrease in blood pressure or tachycardia; rarely cause respiratory depression or urinary retention; seldom cause diarrhea or constipation. If dizziness, lightheadedness, nausea or vomiting are encountered, these effects tend to be self-limiting and to decrease after the first few doses. (See last page of this advertisement for a complete discussion of adverse reactions and a brief discussion of other Prescribing Information.)

50 mg. Tablets

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brand of

pentazocine (as hydrochloride)

the long-range analgesic

a new outlook in chronic pain

of moderate to severe intensity

Contraindications: Talwin, brand of pentazocine (as hydrochloride), should not be administered to patients who are hypersensitive to it.

Warnings: *Head Injury and Increased Intracranial Pressure.* The respiratory depressant effects of Talwin and its potential for elevating cerebrospinal fluid pressure may be markedly exaggerated in the presence of head injury, other intracranial lesions, or a preexisting increase in intracranial pressure. Furthermore, Talwin can produce effects which may obscure the clinical course of patients with head injuries. In such patients, Talwin must be used with extreme caution and only if its use is deemed essential.

Usage in Pregnancy. Safe use of Talwin during pregnancy (other than labor) has not been established. Animal reproduction studies have not demonstrated teratogenic or embryotoxic effects. However, Talwin should be administered to pregnant patients (other than labor) only when, in the judgment of the physician, the potential benefits outweigh the possible hazards. Patients receiving Talwin during labor have experienced no adverse effects other than those that occur with commonly used analgesics. Talwin should be used with caution in women delivering premature infants.

Drug Dependence. There have been instances of psychological and physical dependence on parenteral Talwin in patients with a history of drug abuse and, rarely, in patients without such a history. Abrupt discontinuance following the extended use of parenteral Talwin has resulted in withdrawal symptoms. There have been a few reports of dependence and of withdrawal symptoms with orally administered Talwin. Patients with a history of drug dependence should be under close supervision while receiving Talwin orally.

In prescribing Talwin for chronic use, the physician should take precautions to avoid increases in dose by the patient and to prevent the use of the drug in anticipation of pain rather than for the relief of pain.

Acute CNS Manifestations. Patients receiving therapeutic doses of Talwin have experienced, in rare instances, hallucinations (usually visual), disorientation, and confusion which have cleared spontaneously within a period of hours. The mechanism of this reaction is not known. Such patients should be very closely observed and vital signs checked. If the drug is reinstituted it should be done with caution since the acute CNS manifestations may recur.

Usage in Children. Because clinical experience in children under 12 years of age is limited, administration of Talwin in this age group is not recommended.

Ambulatory Patients. Since sedation, dizziness, and occasional euphoria have been noted, ambulatory patients should be warned not to operate machinery, drive cars, or unnecessarily expose themselves to hazards.

Precautions: *Certain Respiratory Conditions.* Although respiratory depression has rarely been reported after oral administration of Talwin, the drug should be administered with caution to patients with respiratory depression from any cause, severe bronchial asthma and other obstructive respiratory conditions, or cyanosis.

Impaired Renal or Hepatic Function. Decreased metabolism of the drug by the liver in extensive liver disease may predispose to accentuation of side effects. Although laboratory tests have not indicated that Talwin causes or increases renal or hepatic impairment, the drug should be administered with caution to patients with such impairment.

Myocardial Infarction. As with all drugs, Talwin should be used with caution in patients with myocardial infarction who have nausea or vomiting.

Biliary Surgery. Until further experience is gained with the effects of Talwin on the sphincter of Oddi, the drug should be used with caution in patients about to undergo surgery of the biliary tract.

Patients Receiving Narcotics. Talwin is a mild narcotic antagonist. Some patients previously receiving narcotics have experienced mild withdrawal symptoms after receiving Talwin.

CNS Effect. Caution should be used when Talwin is administered to patients prone to seizures; seizures have occurred in a few such patients in association with the use of Talwin although no cause and effect relationship has been established.

Adverse Reactions: Reactions reported after oral administration of Talwin include *gastrointestinal:* nausea, vomiting; infrequently constipation; and rarely abdominal distress, anorexia, diarrhea. *CNS effects:* dizziness, lightheadedness, sedation, euphoria, headache; infrequently weakness, disturbed dreams, insomnia, syncope, visual blurring and focusing difficulty, hallucinations (see *Acute CNS Manifestations* under WARNINGS); and rarely tremor, irritability, excitement, tinnitus. *Autonomic:* sweating; infrequently flushing; and rarely chills. *Allergic:* infrequently rash; and rarely urticaria, edema of the face. *Cardiovascular:* infrequently decrease in blood pressure, tachycardia. *Other:* rarely respiratory depression, urinary retention.

Dosage and Administration: *Adults.* The usual initial adult dose is 1 tablet (50 mg.) every three or four hours. This may be increased to 2 tablets (100 mg.) when needed. Total daily dosage should not exceed 600 mg.

When antiinflammatory or antipyretic effects are desired in addition to analgesia, aspirin can be administered concomitantly with Talwin.

Children Under 12 Years of Age. Since clinical experience in children under 12 years of age is limited, administration of Talwin in this age group is not recommended.

Duration of Therapy. Patients with chronic pain who have received Talwin orally for prolonged periods have not experienced withdrawal symptoms even when administration was abruptly discontinued (see WARNINGS). No tolerance to the analgesic effect has been observed. Laboratory tests of blood and urine and of liver and kidney function have revealed no significant abnormalities after prolonged administration of Talwin.

Overdosage: *Manifestations.* Clinical experience with Talwin overdosage has been insufficient to define the signs of this condition.

Treatment. Oxygen, intravenous fluids, vasopressors, and other supportive measures should be employed as indicated. Assisted or controlled ventilation should also be considered. Although nalorphine and levallorphan are *not* effective antidotes for respiratory depression due to overdosage or unusual sensitivity to Talwin, parenteral naloxone (Narcan®, available through Endo Laboratories) is a specific and effective antagonist. If naloxone is not available, parenteral administration of the analeptic, methylphenidate (Ritalin®), may be of value if respiratory depression occurs.

Talwin is not subject to narcotic controls.

How Supplied: Tablets, peach color, scored. Each tablet contains Talwin (brand of pentazocine) as hydrochloride equivalent to 50 mg. base. Bottles of 100.

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the long-range analgesic

Sound Off

Why should I pay my dues?

Doctor Coury answers:

To: All MSMS Members

From: John J. Coury, MD,
MSMS President-Elect

One of the major efforts during my stint in a leadership role will be in the area of helping component society officers, MSMS Council members, and MSMS members answer the doctor who asks, "What is MSMS or the AMA doing for me?"

This concern was outlined in my comments to the spring meeting of the MSMS House of Delegates.

In this connection, I would like to call the following letter to your attention. MSMS recently received a letter from a member asking why he should continue to pay his dues. This reply, I believe, is positive and to the point. It lists some of the many goals and concerns of MSMS.

May I respectfully urge you to read it . . .

Doctor Coury

Dear Doctor:

You ask for some justification for continuing your membership in MSMS, citing increasing government control, inadequate payments from Blue Shield and regional inequities in Blue Shield payment as reasons to question your membership.

We welcome your letter.

Let me touch on several related matters before answering those specific questions.

The tangible dollar-saving benefits of belonging to MSMS are no doubt well known to you so I'll mention only a few in passing:

a. Group life insurance
b. Group disability insurance
c. Group umbrella liability insurance
d. Group rated medical/hospital insurance

The savings in these alone more than cover the cost of MSMS membership dues. But, I think you are seeking a deeper answer than mere dollars.

Medicine is organized in similar fashion to the rest of society: From the individual, through county, state and national levels. Each has certain responsibilities which it can do best and which the individual probably could not do effectively.

The AMA directs its major concern to national medical affairs and plays an important role in helping to establish policy reflecting physician interest and patient concern. Some physicians blame the AMA because government involvement has increased; but most realize that changes are inevitable. The AMA is working to make the changes as acceptable to physicians as possible. If 50 states or 2,000 county medical societies took their individual views to Congress, chaos would result. United, the AMA can be heard.

This letter will now focus on MSMS. MSMS does indeed address itself to the problems of doctors throughout Michigan. Let's discuss several:

1. Malpractice insurance—cost and availability. Three years ago MSMS began an investigation of a medical society sponsored plan. For reasons valid at that time, we decided the time was not appropriate. However, MSMS last summer authorized another study to bring to The MSMS Council a plan which could be sponsored for its members. MSMS last spring detailed the malpractice problem to 1) the State Legislature and 2) the Insurance Commissioner. As a result we have a House-Senate Study Committee with MD advisors. The State Insurance Commissioner called a conference on the problems February 28, at which MSMS participated. MSMS believes this kind of leadership is the only way to achieve statewide objectives and to solve problems faced by individual doctors.
2. In government relations, MSMS has continuing contacts with congressional, legislative, state

executive and departmental leadership. These relationships do produce a variety of circumstances beneficial to medicine. MSMS tempers the radical movement by keeping factual data before prime decision makers. MSMS strengthens Medicine's friends in government by providing rationale and rebuttals. MSMS makes friends for Medicine by obtaining authentic information for lawmakers, who in turn promote organized medicine's second tenet, "to protect the public health."

Mostly, however, MSMS governmental activities provide a coordination of efforts by component societies, specialty societies and individual physicians to present to government a unified front. This is accomplished through statewide committees such as Legal Affairs (legislation), Governmental Medical Care Programs (government medicine), Highway Injury, Public Health and others, which refine the expressions of physicians in Michigan into a cohesive State Society policy.

The MSMS "Doctor-of-the-Week" program brings volunteer doctors each week to the State Capitol. No staff person can provide the same first-hand experiences and comments, which all work to erode an innate suspicion among politicians of doctors.

3. The new MSMS Bureau of Economic Information is collecting data which MSMS never before possessed. The House of Delegates last year created the Bureau with its own annual budget. MSMS realized that we were handicapped in our dealings with governmental agencies and Blue Shield because of lack of data and statistics.

   You are aware of the physician's overhead cost survey completed this summer and also our statewide survey of fees. The survey results showed that physician's overhead had risen at a rate faster than his income and, secondly, and perhaps more importantly, showed that practice costs were relatively constant throughout the state.

   On the other hand, our fee survey showed a wide variation in charges by regions. These data have been reviewed by The Council and we have authorized a committee to meet with Blue Shield in an attempt to eliminate any inequities that may exist in the payment mechanism.

   Further, using these data, MSMS expects to be asked to play an advisory role or a bargaining role in a statewide payment schedule which may be adopted by the Department of Social Services when it completes the take over of the administration of Medicaid from the current fiscal administrator—Blue Shield this coming fall.

4. The work of the MSMS Relative Value Study is currently being reviewed by the State Department of Social Services for possible implementation in the Medicaid program.

5. One example of some significance that can only have been achieved by the unified voice of nearly 8,000 physicians was recently concluded. Federal Law requires that physicians participating in Medicaid must sign a medical provider direct payment application/agreement if they wish to participate. The proposed contract submitted by the Michigan Department of Social Services requested comments and suggestions. The contract was found to be unacceptable in both content and language.

   MSMS succeeded in modifying the agreement so that it will be better understood and more acceptable to your colleagues. If MSMS or a similar organization did not exist I doubt that Social Services would have asked for the advice of 8,000 fragmented, unorganized physicians. What do you think?

6. MSMS is trying to find new ways to communicate with the public and selected audiences the concerns of the medical profession. In the area of communications and public relations, the staff is assisting the officers and committees so MSMS can deal with vital issues. News releases are issued, news conferences are held, speeches are made, etc., to drive home the points that doctors want to make about better medical care. Much of this can be done very effectively by individual physicians as they inform themselves and then discuss issues with neighbors, patients, their legislators, etc.

We hope this letter answers your questions about the need for a strong Michigan State Medical Society. Our MSMS committees welcome your suggestions and channels are open to the MSMS House of Delegates for ideas you may have regarding MSMS policies and projects. Your cooperation is sincerely sought.

In short, Medicine needs your support and we urge that you continue your membership. We sincerely believe we are serving Medicine.

Let's examine our feelings about lawsuits

By Susan Adelman, MD
Detroit

A new medical syndrome, limited to physicians, has reached epidemic proportions, especially in large cities.

The usual predisposing condition is a conversation held by a physician with a dissatisfied patient threatening a lawsuit. The doctor is seized with a spasm.

But he can avert a lawsuit by regaining the confidence of the patient, who is then meticulously taken care of and discharged as soon as possible. However, if the patient decides to carry out the suit, the illness enters a protracted phase. The doctor makes speeches on the subject to everyone who will listen. He is certain that everyone who talks nearby is telling the tale.

Previous attempts at treatment of the "lawsuitis" syndrome have emphasized the noble image of the physician-scholar, dedicated to fighting disease and relieving human suffering. The legal profession, however, claims to see a different side: hostility, lack of cooperation during trials, withholding of medical information, and general reluctance to explain anything to any lawyer.

Every day we see things that should not be done. In the event of a disastrous "mistake," which causes the lifelong disability or death of a patient, is it morally justified to withhold information from the inquiring relative? By so doing, we protect ourselves while depriving the patient or family of the chance for legal redress.

Our age has already judged that a sum of money can to some extent compensate for the loss of a limb or loved one. We ourselves accept a sum of money in repayment of a legal wrong by someone. How can we deny this to our patients and their families?

Should we not look critically at why we are so hostile toward malpractice lawsuits? Is it partly because so many are initiated by greedy families or calculating lawyers? And what about the assault on our professional pride? How shameful it is to be dragged into court like a common thief! How dirty the legal process! How unpleasant the lawyers!

These are not reasons to resent justifiable suits brought by the families of needlessly deceased patients. The financial support of a whole family may be at stake.

The fact is that every physician may commit lethal errors, and places himself in the position of being morally obligated to admit them. Any doctor who has not been the subject of a malpractice suit is either very young, very cowardly in his medical practice, or deceitful.

The true professional gives of himself, earns respect

By Richard S. Youngs, DDS
President, Michigan Dental Association

Doctor Youngs

To me, professionalism is closely aligned with respect—respect and esteem from one's peers, from one's family and from the community in which one lives and works. Respect is an attribute which must be earned. You aren't born with it, you cannot buy it, and nobody will give it to you. It comes when you deserve it; no sooner, no later.

How is it earned? By placing service to one's profession, one's family, one's community, one's country and one's God above the pursuit of monetary gain. And that, I guess, is what this talk is all about. Service to the professional community.

I think it can be said without refutation that a young man generally enters a profession for two principal reasons: to provide a comfortable living for himself and his family in a manner which will give him some prestige, and to provide an opportunity to give something of himself to individuals and the community. Let's talk about the latter as it relates to dentistry.

In providing dental services, a practitioner acquires a deep sense of satisfaction by improving the health of his patients and providing relief from pain and misery. Many dentists are content to let it rest there—assuming of course, that they are earning satisfactory incomes. This type of man, in my opinion, does not complete his professional obligation.

We have heard a lot in recent years about a dentist's responsibilities to his community. This conjures up thoughts about Community Chest activity, participation in service clubs, devotion to churches and even giving time to governmental affairs. But what of his professional community?

A true professional man has an almost pathological desire to share his knowledge and expertise with his fellow practitioners. It is only when he gives of himself to his colleagues generously, freely and gladly that he emerges as a complete professional.

Let me tell you one thing right here: be good to your profession and to your patients and they will be good to you. Keep this in mind—rather than the almighty dollar—at all times. Too often the professional man has been associated with the high income bracket. There is nothing against making a good living, but the worst possible image you can create for yourself or your profession is to make it obvious that you border on being more interested in your patients' pocketbooks than their teeth. The professions suffer somewhat from this image in today's society. Take care of your patients and the rewards undoubtedly will take care of themselves.

Your profession will be no better than the people who enter it. I am certain you will earn the respect you deserve.

(This article is reprinted, with permission, from the April issue of the JOURNAL OF THE MICHIGAN DENTAL ASSOCIATION. His remarks, part of an address on professionalism given recently by Doctor Youngs, are pertinent to physicians.)

Doctor Stander

Are you ready to become involved?

(Note: The following is a portion of the message in the Saginaw County Medical Society Bulletin by A. Carl Stander, MD, president, about drug abuse.)

A Drug Abuse Workshop, a three day event, sponsored by the Saginaw Drug Abuse Council and attended by a number of our medical society members, is now a matter of record. As a participant, I was impressed by the enthusiasm and sincerity of those present.

At this meeting several other things were apparent. The major drug problem is alcohol. Next came the drug use and abuse of our drug oriented society. The public, the physician, the drug industry, self medication over the counter drugs, TV advertising, the medicine chest, illicit drug distributors were all implicated. Hallucinogens, stimulants, barbiturates, marijuana were all discussed. Edward Lynn, MD, went in depth on a discussion of marijuana, pointing out it was not addictive, nor dangerous, it did not alter reaction, time or alter driving ability, and had many good properties. He stated the legal attitudes were unrealistic and somewhat irrational.

Some change is inevitable. Community action has begun here as in many communities. In a democratic society, as dangers and threats to its members become apparent, positive action can be taken.

You are concerned—you are involved as prescribing physicians whether you like it or not. All society is involved. Are you ready to get involved in the solution?

Quiz

1. What is the best general approach to the patient who has fainted?
2. What are the best strategies in the diagnosis and management of patients with recurrent chest pains?
3. What is the best treatment for the person with low back pain?
4. How can the doctor best handle the neurophysiological aspects of drug abuse?
5. What are national authorities saying now about the surgical approaches to coronary disease?

For the answers to these questions and others, plan now to attend the 107th Annual Session of the Michigan State Medical Society October 1-5 at the Sheraton-Cadillac Hotel in Detroit. Block out the dates now for this important medical event.

MEDIGRAMS

LATE NEWS FROM THE MICHIGAN STATE MEDICAL SOCIETY

Michigan Medicine

June 14, 1972, Volume 71, Number 18
Michigan State Medical Society
Reading Time: 2 Minutes, 40 Seconds

THE MSMS-SUPPORTED BILL TO REPEAL THE BASIC SCIENCE ACT WHICH HAS KEPT SOME CANADIAN AND FOREIGN-TRAINED DOCTORS FROM COMING TO MICHIGAN HAS BEEN PASSED BY THE MICHIGAN LEGISLATURE.

THE MSMS COUNCIL on June 7 adopted a resolution praising the Michigan State Legislature for such action.

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The vote in the House was 96-6, with passage in the Senate by a vote of 35-1. Governor Milliken is expected to sign the bill into law, with immediate effect, next week.

To: H. Curtis Benson, MD, Kalamazoo
From: John Coury, MD, MSMS President-Elect

I think it was you who asked me the other day, "What has MSMS done for me lately in the legislative field?"

This article especially reports on a recent MSMS accomplishment in our legislative work.

In voting to compliment the legislature for passing HB5883, the MSMS Council authorized a letter to each of the lawmakers who concurred with the MSMS position. The letters, from MSMS President Sidney Adler, MD, commended the legislators "who supported this measure for statesmanship in careful and critical examination of an out-dated measure and action reflecting responsiveness to present conditions and needs."

"Let us continue to work together for increases in the number of physicians serving the growing population of the state," Doctor Adler urged.

The medical society supported the enactment of the original basic science requirement in 1937 as a protection to the public. MSMS changed its position, and began working 20 years ago for repeal of the law when standards of medical education improved throughout the world and because of the shortage of physicians in Michigan. Since 1964, MSMS has sought outright repeal of the law.

In 1969, the Legislature amended the law to exempt graduates of U. S. accredited medical schools from the basic science law.

IN RESPONSE TO REQUESTS from MSMS and others, the Michigan Highway Dept. is taking steps to erect directional signs on freeways to help motorists find hospitals with continuous emergency medical care. To qualify, the requesting hospital must "be located within five miles of the interchange, provide continuous service with emergency care, have a doctor on duty 24 hours per day and seven days per week, be licensed by the Michigan Dept. of Public Health, and be located on the intersecting crossroad or be trailblazed by other signs leading to the hospital."

JUNE 21 IS the deadline for Michigan physicians who wish to make contract changes on their MSMS 94000 group Blue Cross and Blue Shield policies during the annual BC-BS reopening. "The Blues" have made their second mailing to all MSMS members asking them to contact the Blue Cross-Blue Shield offices to make any desired changes. Physicians are being specially urged now to add their medical assistants to the policy. Doctors also may add Blue Shield to existing Blue Cross coverage, change to Blue Cross only, add eligible dependents.

MSMS LEGAL COUNSEL Stewart Kerr reports that for the first time in several years the Department of Justice seems to be refocusing on enforcement against smaller businesses and trade associations, including professional associations. The Antitrust Division recently announced its concern about "codes of ethics" which have the effect of setting prices and/or otherwise restricting competition.

THE MSMS COUNCIL ON JUNE 7, 1972 TOOK THE FOLLOWING ACTION:

HEARD A REPORT that Governor Milliken had concurred in arguments of MSMS and has asked the legislature to remove his recommendation for a 3% discount in Medicaid reimbursement from his proposed budget.

AGREED TO WRITE the State Insurance Commissioner objecting to the increases by Medical Protective Company in malpractice insurance rates effective June 1, raising questions about Phase II economic limitations.

ENDORSED THE PROPOSED NEW rules of the Department of Public Health governing blood banks with one amendment. The new rules would no longer require that a physician be present physically at blood banks -- a change that MSMS has sought for some time.

VOTED TO RESTATE the MSMS position supporting the 5-digit AMA Current Procedural Terminology to the Michigan Department of Social Services. The Medical Advisory Committee to the MDSS has recommended the 4-digit code of the National Association of Blue Shield Plans. Appeals that MSMS restate the House of Delegates position were made by the Michigan Society of Interna Medicine, Genesee County Medical Society, and several doctors.

APPROVED THE APPOINTMENT of a committee to implement the development of the articles of incorporation and bylaws of Medical Programs, Inc. (the foundation for peer review).

ASKED THE CHAIRMAN to appoint a committee to further explore methods by which physicians are paid for Medicaid services. House Bill 5305, which would have provided for payments on a statewide uniform fee schedule, has been stalled in the House of Representatives.

VOTED TO SUBMIT a MSMS statement to the AMA hearing in San Francisco June 17 when the AMA Council on Long-Range Planning will invite comments and criticism. The five points to be made by MSMS will appear in "Medigram."

June 14, 1972 Vol. 71, No. 18

Michigan
Medicine

MICHIGAN STATE MEDICAL SOCIETY

Published three times each month and four times in December and January, 38 issues, by the Michigan State Medical Society as its official journal. Second class postage paid at East Lansing, Mich. and at additional mailing offices. Yearly subscription rate, $9.00. Printed in USA. All communications should be addressed to the Publications Committee, Michigan State Medical Society, 120 West Saginaw Street, East Lansing, Michigan 48823. © 1972 Michigan State Medical Society. Phone: Area Code 517, 337-1351.

EDITOR: HERBERT A. AUER

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MEDIGRAMS

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Michigan Medicine

June 29, 1972, Volume 71, Number 19
Michigan State Medical Society

SAN FRANCISCO REPORT: A Brief Summary of AMA Action

(Editor's Note: This summary of the AMA House of Delegates Annual Meeting covers only highlights and cannot be complete because of space limitations. A detailed report will be made by the MSMS delegation in Michigan Medicine. Many articles also will appear in the AMA News - Herb Auer)

THE MICHIGAN DELEGATES to the AMA convention in San Francisco were active in supporting many matters aimed at better health care for the public and at stronger unity in the medical profession,

. . . and efforts to elect Donald N. Sweeny, Jr., MD, Detroit, to the AMA Council on Medical Service were successful. Doctor Sweeny, highly regarded by AMA delegates as an effective delegate and hard-working, experienced member of several AMA committees, defeated a candidate from Texas and one from Ohio in a three-man race. Doctor Sweeny was elected to fill the Council seat being vacated by George W. Slagle, MD, Battle Creek, who had served the maximum of two five-year terms. Doctor Slagle, an MSMS past president, was lauded for his outstanding service.

THE FULL COMPLEMENT of 8 Michigan delegates and 8 alternates plus two sectional delegates from Michigan, participated actively in the affairs of the House, the reference committees, the caucuses, the hospitality suite, etc. Sidney Adler, MD, Detroit, MSMS president, attended and was seated with other state presidents on the stage for the AMA installation services.

LEADERS OF THE STATE Auxiliary to MSMS were prominent in the national Auxiliary convention. The Auxiliary observed its 50th anniversary in San Francisco.

IN ADDITION to the work at the House of Delegates, 34 Michigan physicians were involved in the scientific program, either presenting scientific papers or explaining their scientific exhibits. Total registrations topped the 30,000-mark, with more than 15,000 physicians present.

MICHIGAN-SPONSORED RESOLUTION was adopted by the AMA House instructing the AMA to continue to work to remedy adverse regulatory decisions concerning Titles 18 and 19. The Michigan resolution pointed out that "in too many instances agency regulations have resulted in limitations, denials and retroactive rejection for payment of services to the medically indigent." This resolution was introduced as instructed by the Spring session of the MSMS House of Delegates.

THE DELEGATES dealt with a number of social issues, such as gun controls, marijuana, etc. A substitute resolution offered by Michigan was adopted after a long debate over a resolution about the illegal use of firearms. The Michigan approach was that AMA "express its strong abhorrence and continued opposition to the use of a firearm or any weapon in the commission of a crime and that it urge the enforcement of strict penalties for such use."

RE: MARIJUANA, AMA House approved a proposal that would prohibit the public use of marijuana and also recommend that "personal possession of insignificant amounts of marijuana be considered at most a misdemeanor with commensurate penalties applied." The full resolution included a statement that the "AMA does not condone the production, sale, or use of marijuana."

SOME DELEGATES ANTICIPATED that AMA President Wesley Hall, MD, might be critical again of various aspects of the AMA, but his annual address to the House was positive and constructive. He was lauded for his "untiring and dedicated service to medicine."

C. A. HOFFMAN, MD, West Virginia, the new AMA president, in his inaugural, observed that doctors are threatened as never before by attacks on medical costs, medical methods, and even their life styles. He underscored his opposition to government medical programs.

SEVERAL CONSTITUTIONAL revisions were advanced by the delegates acting on the recommendations of the House Reference Committee on Constitutions and Bylaws. Joseph A. Witter, MD, Bloomfield Hills, served on that busy committee. AMA membership will be available to medical students through county and state societies or directly with the AMA if not available locally.

AMA HOUSE APPROVED a long report about ways to improve medical services in rural and medically underserved areas. Robert Rice, MD, of Greenville, is a member of the Commission on Rural Medical Service, and helped write Report Q. The AMA supported legislation which would provide financial tax write-off incentives to attract doctors to rural and inner-city areas.

THE HOUSE again opposed any MD draft to send doctors into such areas to provide civilia health care.

AMA REAFFIRMED its support of catastrophic health insurance coverage related to comprehensive health benefits, rather than as free standing programs.

THE RECENT AMA MEMBERSHIP poll was applauded. Opinions expressed by members and nonmembers will be considered by the AMA in developing new projects and programs. There was a 52.9 percent response -- which is really outstanding as polls go.

THE DELEGATES were impressed with a detailed report by Ernest Howard, MD, executive vice president of the AMA. The report effectively tells what the AMA is doing for both the profession and the public. Interested members can write MSMS for a copy.

THE HOUSE VOTED TO ENCOURAGE individual physicians to continue to speak out on public issues.

THE HOUSE ALSO approved a proposal to ballot at the next session on the question of limiting the terms of members of the AMA Board of Trustees and approved a report on the acceptance of osteopaths into residencies. A number of questions about developing physician assistant programs was referred to the Council on Medical Education for study

THE MSMS DELEGATES are Doctor Sweeny, chairman, Detroit; Otto K. Engelke, MD, vice chairman, Ann Arbor; John J. Coury, MD, Port Huron; Paul T. Lahti, MD, Royal Oak; John W. Moses, MD, Detroit; Robert E. Rice, MD, Greenville; George W. Slagle, MD, Battle Creek, and Joseph A. Witter, MD, Bloomfield Hills.

THE MSMS ALTERNATE DELEGATES are Donald T. Anderson, MD, Kingsford; Vernon V. Bass, MD, Saginaw; James C. Danforth, Jr., MD, Grosse Pointe Woods; Brooker L. Masters, MD, Fremont; Richard J. McMurray, MD, Flint; Marjorie Peebles Meyers, MD, Detroit; Robert C. Prophater, MD, Bay City, and Frank B. Walker, II, MD, Grosse Pointe Park.

TWO DELEGATES FROM SPECIALTIES also are from Michigan. They are Harold F. Falls, MD, representing Ophthalmology; and Chris Zarafonetis, MD, representing Clinical Pharmacology and Therapeutics, both of Ann Arbor.

PHYSICIAN PARTICIPATION IN MEDICAID (TITLE XIX) AND CRIPPLED CHILDREN (TITLE V) PROGRAMS

The State advised physicians Jan. 28, 1972, that "the Michigan Departments of Social Services and Public Health are in the final phases of implementing redesigned Medicaid and Crippled Children fiscal and related claims processing systems." This new system will replace Blue Shield as fiscal intermediary for claims payments. The scheduled date for the final transition of these intermediary responsibilities with a test group beginning on Aug. 1 is Oct. 1.

Physicians will receive a Medical Provider Direct Payment Application/Agreement with Instruction Sheets for completing the forms. Physicians who enroll and receive payment for services under the program must complete both the Application and Agreement, sign the form and return it to Social Services. The physician's name will then be added to the master list of eligible providers and a Practitioner's Manual and a supply of invoices will be sent to him. The State and/or the physician may terminate eligibility upon 60 days written notice.

Notice to Physicians Receiving Medical Provider Direct Payment Application/Agreement

The front contains pertinent data relating to you as a provider to establish eligibility. The back of the document is the Agreement setting forth conditions for participation to fulfill Federal requirements. Only Clauses 1-7 and 12 apply to physicians. Your decision to participate is voluntary, but you must enroll to receive payment for treating eligibles.

The Michigan Department of Social Services will conduct Practitioner Seminars during the month of July for the 10 percent test group to be converted in the Counties of Ingham, Eaton and Genesee. Other Seminars will be conducted later throughout the State to assist all enrolled providers to understand the procedures for filling out invoices and billings. Physicians may find it more advantageous to send their medical or office assistant to these Seminars - those employees responsible for eligibility, billing and other paper work. These Seminars will not be policy or coverage sessions.

A Practitioner's Manual will be sent you following receipt by Social Services of your signed Application/Agreement. Contents include: General Description, Recipient Eligibility, Coverages and Limitations, Billing and Inquiry and Crippled Children Program. Appendices and a glossary are also included. You and your office aide should thoroughly review this material before attending a Seminar in order that your questions can be answered at that time.

Doctors are protesting Department of Social Services requirement that provider agreement for new Medicaid fiscal program must be signed before provider manual and fee manual are given to them. It's buying a pig-in-a-poke, doctors say, to insist on agreement before receiving all information on the program.

MSMS Department of Government Relations staff reviewed this Manual and conveyed objections to Social Services about certain portions. We protested the gratuitous warning to physicians not to exploit, advertise or engage in fraudulent billings and procedures.

Another portion, equally disturbing, notes that "a pharmacist will, with the obtained consent of the prescribing physician, be allowed to exercise his professional judgment in selecting the drug prescribed on a basis consistent with chemical equivalence, bioavailability and good economy." Later manuals may use the word "permission" instead of "obtained consent." MSMS urges physicians to refuse to sign any form which would authorize pharmacists to substitute. Ethical pharmacists will contact the physician when a prescribed drug is not available. Substitution without the expressed authorization of the physician is illegal.

While enrollment into either program does not legally require a provider to render services, all services rendered to an eligible recipient by an enrolled provider, must be in compliance with the conditions of the provider agreement.

The MSMS Department of Government Relations solicits your comments and suggestions.

TWO HUNDRED FIFTEEN MORE MEDICAL STUDENTS are scheduled for Michigan medical schools next fall under the higher education appropriations bill passed by the Senate. Bill still faces floor action in the House. As it stands now, MSU College of Human Medicine will increase by 54 students, with a freshman class of 85; U-M will increase by 50, with a freshman class of 237; Wayne State will increase by 111, with a freshman class of 240. MSU's DO school will increase its enrollment by 64, with the entering freshman class. Also programmed is the 1973-4 freshman class at WSU of 256, 16 more than planned for 1972-3.

MICHIGAN DEPARTMENT OF PUBLIC HEALTH will hold a public hearing on proposed rules for cardiac care, intensive care and hemodialysis units in hospitals, Thursday, July 13, in the auditorium of the Seven Story Office Building in the Capitol Complex in Lansing. Copies of the proposed rules can be obtained from Hermann Ziel, MD, Chief, Bureau of Health Facilities, MDPH, 3500 North Logan, Lansing, Michigan 48914. Written statements filed with Doctor Ziel prior to July 13 will be made part of the hearing record.

THE MSMS COMMITTEE ON MEDICAL SOCIO-ECONOMICS will meet with representatives of Blue Shield July 12 to discuss Blue Shield's Usual, Customary and Reasonable Fee Program and to explore possible inequities in the program.

June 29, 1972 Vol. 71, No. 19

Michigan
Medicine

MICHIGAN STATE MEDICAL SOCIETY

Published three times each month and four times in December and January, 38 issues, by the Michigan State Medical Society as its official journal. Second class postage paid at East Lansing, Mich. and at additional mailing offices. Yearly subscription rate, $9.00. Printed in USA. All communications should be addressed to the Publications Committee, Michigan State Medical Society, 120 West Saginaw Street, East Lansing, Michigan 48823. © 1972 Michigan State Medical Society. Phone: Area Code 517, 337-1351.

EDITOR: HERBERT A. AUER

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